

The Skeptic Zone
Show 335 - 22 March 2015



Jo & Heidi

1
00:00:22,730 --> 00:00:09,110
welcome to the skeptic zone the podcast

2
00:00:29,420 --> 00:00:25,380
hello and welcome to the skeptics own

3
00:00:32,729 --> 00:00:29,430
episode number 335 for the 22nd of March

4
00:00:35,190 --> 00:00:32,739
2015 Richard Saunders here with you from

5
00:00:37,530 --> 00:00:35,200
Sydney Australia what's coming up on

6
00:00:39,299 --> 00:00:37,540
this week's episode of the skeptic zone

7
00:00:42,060 --> 00:00:39,309
we've got evidence please with Joe

8
00:00:44,040 --> 00:00:42,070
alabaster and this week Joe's going to

9
00:00:47,869 --> 00:00:44,050
be looking at some well interesting

10
00:00:50,520 --> 00:00:47,879
shops in the Sydney suburb of Newtown

11
00:00:52,799 --> 00:00:50,530
interesting indeed there are some signs

12
00:00:55,410 --> 00:00:52,809
posting the window of some shops we

13
00:00:57,660 --> 00:00:55,420

might call them new ad shops which makes

14

00:00:59,790 --> 00:00:57,670

some pretty extraordinary claims Joe's

15

00:01:01,680 --> 00:00:59,800

going to be reading out those claims and

16

00:01:03,840 --> 00:01:01,690

with the help of me and chief

17

00:01:06,749 --> 00:01:03,850

investigator from Australia skeptics Ian

18

00:01:09,630 --> 00:01:06,759

Bryce we're going to be dissecting some

19

00:01:11,450 --> 00:01:09,640

of the claims made on the sides in the

20

00:01:14,279 --> 00:01:11,460

windows of the shops in Newtown

21

00:01:16,260 --> 00:01:14,289

interpreting new-age signs coming up at

22

00:01:17,790 --> 00:01:16,270

the top of the show then it's a week in

23

00:01:20,760 --> 00:01:17,800

signs from our good friends at the Royal

24

00:01:22,830 --> 00:01:20,770

Institution of Australia and following

25

00:01:25,740 --> 00:01:22,840

that it's Heidi Robinson with the raw

26

00:01:28,590 --> 00:01:25,750

skeptic report and Heidi reports this

27

00:01:30,870 --> 00:01:28,600

week on the sad news of a baby dying of

28

00:01:33,270 --> 00:01:30,880

whooping cough in Australia in this day

29

00:01:35,639 --> 00:01:33,280

and age it's it's tragic and so

30

00:01:37,290 --> 00:01:35,649

unnecessary and also an important

31

00:01:39,809 --> 00:01:37,300

announcement on vaccinations from the

32

00:01:41,880 --> 00:01:39,819

New South Wales Government now here's an

33

00:01:44,969 --> 00:01:41,890

important announcement for those people

34

00:01:47,400 --> 00:01:44,979

living in Sydney you can meet me and Joe

35

00:01:51,059 --> 00:01:47,410

alabaster and we'll try and encourage

36

00:01:53,850 --> 00:01:51,069

Maynard to come along as well that will

37

00:01:57,749 --> 00:01:53,860

be at the Australian skeptics dinner

38

00:01:59,730 --> 00:01:57,759

meeting medical madness and embarrassing

39

00:02:02,790 --> 00:01:59,740

bodies you've heard him on the skeptic

40

00:02:04,609 --> 00:02:02,800

zone it's dr. Brad Makai and this will

41

00:02:08,430 --> 00:02:04,619

be the right Eastwood Leagues Club

42

00:02:10,770 --> 00:02:08,440

Saturday March to 28 so that's a your

43

00:02:13,110 --> 00:02:10,780

this Saturday coming but the deadline

44

00:02:14,940 --> 00:02:13,120

for getting your tickets is Wednesday

45

00:02:16,710 --> 00:02:14,950

the 25th of March so this coming

46

00:02:20,640 --> 00:02:16,720

Wednesday you have to be quick bookings

47

00:02:23,400 --> 00:02:20,650

are essential at ww skeptics Comte you

48

00:02:27,089 --> 00:02:23,410

and this promises to be one of the more

49

00:02:29,670 --> 00:02:27,099

interesting of our dinner meetings this

50

00:02:32,640 --> 00:02:29,680

year hope to see you there Sydney people

51
00:02:33,490 --> 00:02:32,650
go to skeptics calm today you / shop or

52
00:02:35,980 --> 00:02:33,500
just skeptics

53
00:02:37,990 --> 00:02:35,990
comdata you for more information and get

54
00:02:39,910 --> 00:02:38,000
your tickets there'll be a lucky door

55
00:02:43,480 --> 00:02:39,920
prize one person will have their dinner

56
00:02:45,880 --> 00:02:43,490
fee reimbursed I think we pull that out

57
00:02:47,260 --> 00:02:45,890
of that or something anyway I hope to

58
00:02:49,480 --> 00:02:47,270
see you there and if you do come along

59
00:02:51,580 --> 00:02:49,490
come up and say hello who knows you

60
00:02:53,949 --> 00:02:51,590
might even be interviewed for the

61
00:02:55,570 --> 00:02:53,959
skeptic zone but now it's time for me to

62
00:03:00,280 --> 00:02:55,580
not run downstairs because here I am

63
00:03:06,580 --> 00:03:00,290

downstairs already enjoying a nice big

64

00:03:10,650 --> 00:03:06,590

glass mmm of raspberry cordial with ice

65

00:03:13,479 --> 00:03:10,660

because that's still muggy in Sydney

66

00:03:34,309 --> 00:03:13,489

while I'm enjoying my raspberry cordial

67

00:03:43,699 --> 00:03:36,530

what we want is some more evidence

68

00:03:43,709 --> 00:03:49,780

hello this is Joe alabaster

69

00:03:54,739 --> 00:03:52,520

there's an inner-city suburb in Sydney

70

00:03:57,140 --> 00:03:54,749

called Newtown which is a fantastic

71

00:03:59,000 --> 00:03:57,150

place to spend a few hours wandering up

72

00:04:01,190 --> 00:03:59,010

and down the Main Street looking at

73

00:04:04,339 --> 00:04:01,200

shops and stopping for a coffee or a

74

00:04:08,599 --> 00:04:04,349

snack Newtown is around 4 kilometers

75

00:04:11,330 --> 00:04:08,609

southwest of the Sydney CBD in the 1960s

76
00:04:13,580 --> 00:04:11,340
and 70s affordable share housing and the

77
00:04:15,949 --> 00:04:13,590
suburbs close proximity to the city in

78
00:04:18,319 --> 00:04:15,959
universities during a large student

79
00:04:20,270 --> 00:04:18,329
population and Newton became something

80
00:04:22,779 --> 00:04:20,280
of a bohemian center with a thriving

81
00:04:25,249 --> 00:04:22,789
cafe and live entertainment culture

82
00:04:28,430 --> 00:04:25,259
currently and more Road and King Street

83
00:04:30,230 --> 00:04:28,440
hosts over 600 shop fronts and some of

84
00:04:32,390 --> 00:04:30,240
the retailers who have set up in the

85
00:04:35,689 --> 00:04:32,400
area make some rather questionable

86
00:04:38,330 --> 00:04:35,699
claims the skeptic zone took a walk down

87
00:04:41,330 --> 00:04:38,340
King Street Newtown and in the window of

88
00:04:46,400 --> 00:04:41,340

a new age shop noticed this sign about a

89

00:04:48,529 --> 00:04:46,410

crystal bed energy vibration medicine is

90

00:04:51,980 --> 00:04:48,539

fast becoming a very popular alternative

91

00:04:54,560 --> 00:04:51,990

healing therapy it is the medicine of

92

00:04:57,020 --> 00:04:54,570

the future the crystal light bed

93

00:04:59,510 --> 00:04:57,030

modality is the ultimate life enhancing

94

00:05:02,330 --> 00:04:59,520

experience because of the profound work

95

00:05:04,430 --> 00:05:02,340

being done on all levels of the body the

96

00:05:07,879 --> 00:05:04,440

benefits outweigh many other healing

97

00:05:10,159 --> 00:05:07,889

therapies available today it combines

98

00:05:13,219 --> 00:05:10,169

the power of colour and crystal light

99

00:05:15,620 --> 00:05:13,229

frequencies using an array of specially

100

00:05:18,050 --> 00:05:15,630

cut and lighted quartz crystals and

101
00:05:20,870 --> 00:05:18,060
involves the application of light beamed

102
00:05:23,089 --> 00:05:20,880
through a lamp the advantages and

103
00:05:27,020 --> 00:05:23,099
effects of this therapy are clarified

104
00:05:29,270 --> 00:05:27,030
further on crystals are capable of

105
00:05:32,390 --> 00:05:29,280
transmitting storing and modulating

106
00:05:35,060 --> 00:05:32,400
energy the highly organized state of the

107
00:05:37,310 --> 00:05:35,070
quartz crystals allow photons to move

108
00:05:41,120 --> 00:05:37,320
without being trapped and condensed as

109
00:05:44,240 --> 00:05:41,130
in other forms of matter crystals are a

110
00:05:46,279 --> 00:05:44,250
primary source of natural healing due to

111
00:05:48,439 --> 00:05:46,289
their symmetrical molecular structure

112
00:05:51,709 --> 00:05:48,449
and their effect on the chromatic

113
00:05:54,409 --> 00:05:51,719

composition of light the vibration of

114

00:05:56,510 --> 00:05:54,419

the crystals resonating and energizing

115

00:05:59,589 --> 00:05:56,520

the sixty to ninety percent of water in

116

00:06:03,290 --> 00:05:59,599

our bodies has a profound healing effect

117

00:06:05,809 --> 00:06:03,300

dr. masaru emoto a visionary

118

00:06:08,210 --> 00:06:05,819

his researcher in his book the message

119

00:06:11,119 --> 00:06:08,220

from water speaks of the positive and

120

00:06:15,529 --> 00:06:11,129

negative and the science stops right

121

00:06:17,420 --> 00:06:15,539

there mid sentence huh now I've got a

122

00:06:19,100 --> 00:06:17,430

special guest on evidence place to

123

00:06:22,610 --> 00:06:19,110

discuss this crystal business further

124

00:06:25,070 --> 00:06:22,620

it's Richard Saunders well thank you Joe

125

00:06:28,040 --> 00:06:25,080

alabaster for that reading out of that

126

00:06:30,290 --> 00:06:28,050

interesting sign in the window there in

127

00:06:31,909 --> 00:06:30,300

the New Age shop in Newtown I'm with Ian

128

00:06:33,619 --> 00:06:31,919

Bryce the chief investigator of

129

00:06:36,260 --> 00:06:33,629

Australian skeptics now Ian you've had a

130

00:06:40,520 --> 00:06:36,270

read of that or a look at the the the

131

00:06:43,760 --> 00:06:40,530

sign in the window all to do with a ah a

132

00:06:46,610 --> 00:06:43,770

crystal bed an energy crystal bed that's

133

00:06:48,110 --> 00:06:46,620

right yes Richard I was trying to find

134

00:06:51,589 --> 00:06:48,120

something in it that I could hang my hat

135

00:06:53,540 --> 00:06:51,599

on set to attack but it's all a bit

136

00:06:55,670 --> 00:06:53,550

wishy-washy so said I thought I tell you

137

00:06:57,439 --> 00:06:55,680

a bit about crystals and other objects

138

00:06:59,629 --> 00:06:57,449

yeah because this what we just heard

139

00:07:01,249 --> 00:06:59,639

from Joe alabaster talks about for

140

00:07:03,529 --> 00:07:01,259

example crystals are capable of

141

00:07:05,629 --> 00:07:03,539

transmitting storing and modulating

142

00:07:08,899 --> 00:07:05,639

energy the highly organized state of the

143

00:07:11,839 --> 00:07:08,909

quartz crystals allow photons to move up

144

00:07:14,120 --> 00:07:11,849

being trapped and condensed no dear and

145

00:07:16,189 --> 00:07:14,130

so or photons what can you tell us about

146

00:07:19,129 --> 00:07:16,199

crystals and well i have here Richard

147

00:07:20,749 --> 00:07:19,139

yeah a rock yeah and a crystal oh yeah

148

00:07:21,980 --> 00:07:20,759

this'll can see you since it so I

149

00:07:24,469 --> 00:07:21,990

thought I tell you a bit about physical

150

00:07:26,209 --> 00:07:24,479

properties to go back to that's what

151
00:07:28,219 --> 00:07:26,219
they sound like me Michael bit fell off

152
00:07:31,010 --> 00:07:28,229
sorry good Phillip if it stops working

153
00:07:32,990 --> 00:07:31,020
there and as you can see I can I can put

154
00:07:35,209 --> 00:07:33,000
them on these scales oh yes and weigh

155
00:07:38,149 --> 00:07:35,219
them lift up the microphone indeed yes

156
00:07:43,670 --> 00:07:38,159
so we find that the rock weighs having

157
00:07:46,219 --> 00:07:43,680
12 grams and the crystal weighs 150

158
00:07:47,899 --> 00:07:46,229
grams right nearly the same so that's a

159
00:07:50,570 --> 00:07:47,909
basic physical property that everything

160
00:07:52,309 --> 00:07:50,580
has and other things they have is length

161
00:07:54,499 --> 00:07:52,319
and dimensions for example I can use

162
00:07:55,700 --> 00:07:54,509
these calipers to measure the length the

163
00:07:57,649 --> 00:07:55,710

length and the height and the width of

164

00:07:59,420 --> 00:07:57,659

the rock yes the crystal and but they're

165

00:08:01,010 --> 00:07:59,430

simple physical properties yeah it's a

166

00:08:03,469 --> 00:08:01,020

lovely it's like a little cluster of

167

00:08:07,760 --> 00:08:03,479

what's the crystal is that there's sort

168

00:08:11,540 --> 00:08:07,770

of a almost looks like amber in color

169

00:08:14,659 --> 00:08:11,550

yes I'm not sure quite what ones that is

170

00:08:16,690 --> 00:08:14,669

amethyst is very popular but but I think

171

00:08:19,390 --> 00:08:16,700

that's more purpley I think

172

00:08:21,310 --> 00:08:19,400

around 20 yeah it's got many is that

173

00:08:22,900 --> 00:08:21,320

what five centimeters across by about

174

00:08:25,450 --> 00:08:22,910

three centimeters tall it's just like a

175

00:08:27,700 --> 00:08:25,460

cluster of christian yes and some people

176

00:08:29,350 --> 00:08:27,710

many people in fact claim healing

177

00:08:30,760 --> 00:08:29,360

properties for them so that's what we're

178

00:08:32,290 --> 00:08:30,770

here to talk about are a physical

179

00:08:34,990 --> 00:08:32,300

properties everything has physical

180

00:08:37,450 --> 00:08:35,000

properties and are they magic of course

181

00:08:38,890 --> 00:08:37,460

not in fact this piece of rock if you

182

00:08:41,770 --> 00:08:38,900

look at azeri microscope you'll find us

183

00:08:43,270 --> 00:08:41,780

has many fine grain crystals inside it

184

00:08:44,680 --> 00:08:43,280

right when I think as you can't see it

185

00:08:46,330 --> 00:08:44,690

without an instrument so P I think it's

186

00:08:47,830 --> 00:08:46,340

different from the rock so there's

187

00:08:50,380 --> 00:08:47,840

nothing that the crystals going to do

188

00:08:51,820 --> 00:08:50,390

that the rock doesn't oh I see that

189

00:08:55,360 --> 00:08:51,830

that's interesting I never thought about

190

00:08:56,680 --> 00:08:55,370

that yeah and scientists will limit the

191

00:08:58,900 --> 00:08:56,690

physical objects of other properties

192

00:09:00,400 --> 00:08:58,910

like hardness and melting point and

193

00:09:03,250 --> 00:09:00,410

boiling point and whether they dissolved

194

00:09:04,690 --> 00:09:03,260

in fluids yeah and engineers make use of

195

00:09:08,140 --> 00:09:04,700

all these properties to make things like

196

00:09:10,750 --> 00:09:08,150

concrete and glass and plastic and

197

00:09:12,630 --> 00:09:10,760

liquid crystal displays because they

198

00:09:14,920 --> 00:09:12,640

know about these things and there's

199

00:09:17,410 --> 00:09:14,930

nothing magical about crystals they're

200

00:09:22,540 --> 00:09:17,420

just physical objects of course they are

201
00:09:24,970 --> 00:09:22,550
so let's talk about this the the opinion

202
00:09:26,890 --> 00:09:24,980
out there for many of the New Age crowd

203
00:09:29,290 --> 00:09:26,900
that crystals will not only have

204
00:09:30,730 --> 00:09:29,300
mystical properties but they have they

205
00:09:33,160 --> 00:09:30,740
make their very different claims that

206
00:09:36,430 --> 00:09:33,170
crystals can do things to energy energy

207
00:09:37,960 --> 00:09:36,440
yes that's right when the New Age people

208
00:09:39,700 --> 00:09:37,970
talk about energy they must be talking

209
00:09:41,770 --> 00:09:39,710
about something different on my wall out

210
00:09:43,000 --> 00:09:41,780
there this what's called an energy meter

211
00:09:45,070 --> 00:09:43,010
that measures the kilowatt hours

212
00:09:47,350 --> 00:09:45,080
supplied by the electricity since it was

213
00:09:49,660 --> 00:09:47,360

last spread to my house and that

214

00:09:52,630 --> 00:09:49,670

measures energy hmm i'd like to ask

215

00:09:53,980 --> 00:09:52,640

these new-age proponents if i give them

216

00:09:55,480 --> 00:09:53,990

this crystal how will they use the

217

00:09:57,490 --> 00:09:55,490

energy meter to measure the energy in

218

00:09:59,590 --> 00:09:57,500

the crystal oh it's got indicate

219

00:10:02,020 --> 00:09:59,600

spiritual individually yeah that's a

220

00:10:04,000 --> 00:10:02,030

element is mechanical energy yeah at

221

00:10:07,120 --> 00:10:04,010

this if I drop this under your head from

222

00:10:08,650 --> 00:10:07,130

a great hole its kinetic energy is

223

00:10:10,330 --> 00:10:08,660

measured by asim peppermint whether you

224

00:10:12,850 --> 00:10:10,340

got potential than kinetic right that's

225

00:10:14,950 --> 00:10:12,860

right yes that's right the potential

226

00:10:16,990 --> 00:10:14,960

energy due to heart get over to kinetic

227

00:10:19,300 --> 00:10:17,000

energy Judy giggles its converted to

228

00:10:21,430 --> 00:10:19,310

painful if anything was it it's fine he

229

00:10:24,850 --> 00:10:21,440

said the energy is a half MV squared

230

00:10:27,730 --> 00:10:24,860

mess times velocity squared and of

231

00:10:29,320 --> 00:10:27,740

course if the crystal lands on your head

232

00:10:30,100 --> 00:10:29,330

it'll hurt exactly the same as a rock

233

00:10:31,690 --> 00:10:30,110

under the same

234

00:10:33,240 --> 00:10:31,700

conditions yes they're about the same

235

00:10:35,319 --> 00:10:33,250

yes absolutely so the energy of a

236

00:10:37,720 --> 00:10:35,329

crystal is no different from the energy

237

00:10:39,670 --> 00:10:37,730

of a rock in that respect your lute ly

238

00:10:41,290 --> 00:10:39,680

right now well let's have a look at this

239

00:10:43,630 --> 00:10:41,300

interesting claim near the bottom here

240

00:10:46,530 --> 00:10:43,640

that what day I alabaster distritos the

241

00:10:50,110 --> 00:10:46,540

vibration of the crystals resonating and

242

00:10:53,110 --> 00:10:50,120

energizing to the 60 dash ninety percent

243

00:10:55,780 --> 00:10:53,120

of water in our bodies has a profound

244

00:10:57,490 --> 00:10:55,790

healing effect what do you okay that

245

00:10:59,829 --> 00:10:57,500

resonating and vibration this is the

246

00:11:02,019 --> 00:10:59,839

other word vibration vibrations yes they

247

00:11:03,900 --> 00:11:02,029

love that word I think most of us have

248

00:11:08,460 --> 00:11:03,910

probably mowing the lawn with an old

249

00:11:11,639 --> 00:11:08,470

Victor I do that vibrates your hands and

250

00:11:13,840 --> 00:11:11,649

it shakes and shadows and kicks and

251

00:11:18,699 --> 00:11:13,850

shakes well that's vibration gives

252

00:11:21,040 --> 00:11:18,709

vibration here and these days power

253

00:11:22,630 --> 00:11:21,050

mowers have to have means to control the

254

00:11:24,490 --> 00:11:22,640

vibration because it's possible that

255

00:11:26,680 --> 00:11:24,500

vibration in fact as known but too much

256

00:11:29,710 --> 00:11:26,690

vibration kills the nerves in your

257

00:11:31,420 --> 00:11:29,720

fingers and hands and you yeah yeah yeah

258

00:11:35,319 --> 00:11:31,430

so fibration is not to be taken lightly

259

00:11:37,650 --> 00:11:35,329

and crystals don't produce vibration if

260

00:11:40,360 --> 00:11:37,660

I was to stick this rock on top of the

261

00:11:43,000 --> 00:11:40,370

victim Otomo shagging and spluttering

262

00:11:44,230 --> 00:11:43,010

away you held mower yeah it would jump

263

00:11:45,880 --> 00:11:44,240

up and down and rattle because the

264

00:11:47,139 --> 00:11:45,890

vibrations have been transmitted to it

265

00:11:51,870 --> 00:11:47,149

that's right but just sitting here and

266

00:11:54,759 --> 00:11:51,880

I'm holding the crystals now in my hand

267

00:11:56,920 --> 00:11:54,769

in what sense is this vibrating if I was

268

00:11:58,810 --> 00:11:56,930

to take the new age with certainly not

269

00:12:00,970 --> 00:11:58,820

vibrating this number meaningful way

270

00:12:02,470 --> 00:12:00,980

they don't know as I'm it will transmit

271

00:12:03,730 --> 00:12:02,480

vibration if you put them in one side

272

00:12:07,240 --> 00:12:03,740

they'll come out deadly but it's not

273

00:12:10,569 --> 00:12:07,250

producing anything so when they say the

274

00:12:12,009 --> 00:12:10,579

vibration of crystals is its meaning

275

00:12:14,740 --> 00:12:12,019

just nonsense if they don't know what

276

00:12:16,210 --> 00:12:14,750

the word means i have to agree data a

277

00:12:18,280 --> 00:12:16,220

lot of these people don't know what the

278

00:12:20,819 --> 00:12:18,290

word energy means because in this blurb

279

00:12:24,579 --> 00:12:20,829

it's used here we are right at the top

280

00:12:27,009 --> 00:12:24,589

energy / vibration medicine is becoming

281

00:12:28,689 --> 00:12:27,019

very popular energy vibration medicine

282

00:12:31,060 --> 00:12:28,699

that's a new term perhaps nuclear

283

00:12:34,810 --> 00:12:31,070

medicine where it is the Arctic medicine

284

00:12:36,939 --> 00:12:34,820

a lot of the proponents of homeopathy oh

285

00:12:40,000 --> 00:12:36,949

my Appa 'they will say that its energy

286

00:12:41,519 --> 00:12:40,010

medicine homeopathy is energy man it's

287

00:12:44,369 --> 00:12:41,529

not physical energy

288

00:12:46,439 --> 00:12:44,379

physical medicine is not what we might

289

00:12:48,540 --> 00:12:46,449

understand but it works on energy oh

290

00:12:50,009 --> 00:12:48,550

well it must be magic obviously they

291

00:12:52,199 --> 00:12:50,019

don't know it energy means you don't

292

00:12:54,199 --> 00:12:52,209

seriously they don't and when you're

293

00:12:57,689 --> 00:12:54,209

talking with these people can be very

294

00:13:00,749 --> 00:12:57,699

very frustrating because when you're not

295

00:13:04,019 --> 00:13:00,759

talking the same language in effect the

296

00:13:06,689 --> 00:13:04,029

other one they refer to a notice dr.

297

00:13:09,900 --> 00:13:06,699

masaru emoto a visionary japanese

298

00:13:11,400 --> 00:13:09,910

researcher in his book the message from

299

00:13:13,290 --> 00:13:11,410

water speaks of the positive and

300

00:13:15,689 --> 00:13:13,300

negative and it just ends at the

301
00:13:17,970 --> 00:13:15,699
positive and negative it is just a heads

302
00:13:20,189 --> 00:13:17,980
haha what I wouldn't say they didn't

303
00:13:22,769 --> 00:13:20,199
know what constitutes a sentence well

304
00:13:24,840 --> 00:13:22,779
there you go but he's the guy well in

305
00:13:26,549 --> 00:13:24,850
all and as possible fairness to these

306
00:13:28,199 --> 00:13:26,559
people maybe they just cut the page off

307
00:13:29,699 --> 00:13:28,209
their own and okay now that he's the guy

308
00:13:32,519 --> 00:13:29,709
of course he died last year but he was

309
00:13:34,829 --> 00:13:32,529
taking the microscopic pictures of water

310
00:13:36,660 --> 00:13:34,839
yes indeed he was singing to the water

311
00:13:38,009 --> 00:13:36,670
we use singing to the water and then you

312
00:13:39,869 --> 00:13:38,019
freeze the water and it changes the

313
00:13:42,299 --> 00:13:39,879

shape of the crystals and well we did a

314

00:13:45,540 --> 00:13:42,309

bit of research on him as I had before

315

00:13:48,629 --> 00:13:45,550

as well Andy variously causes of dr.

316

00:13:51,509 --> 00:13:48,639

professors sir oh yes and he's never

317

00:13:55,139 --> 00:13:51,519

conducted research at a university his

318

00:13:57,780 --> 00:13:55,149

degree is from in the sri lankan degree

319

00:14:00,030 --> 00:13:57,790

mill oh really and if you didn't know if

320

00:14:01,499 --> 00:14:00,040

you research that they don't have any

321

00:14:03,600 --> 00:14:01,509

lectures you don't have to attend victor

322

00:14:04,949 --> 00:14:03,610

they don't have any laboratory's the

323

00:14:06,869 --> 00:14:04,959

requirement for getting a degree there

324

00:14:08,249 --> 00:14:06,879

is to send them five hundred dollars in

325

00:14:11,910 --> 00:14:08,259

a statement of what you would like your

326

00:14:13,470 --> 00:14:11,920

certificate to say then you get a

327

00:14:15,629 --> 00:14:13,480

doctorate that's right in fact they've

328

00:14:17,730 --> 00:14:15,639

issued 1,000,000 an estimated 1 million

329

00:14:19,319 --> 00:14:17,740

degrees hey that's not bad without

330

00:14:23,340 --> 00:14:19,329

having a lecture theatre or laboratory

331

00:14:24,540 --> 00:14:23,350

that's not bad yeah I said that again is

332

00:14:27,509 --> 00:14:24,550

the type of thing that these people

333

00:14:29,639 --> 00:14:27,519

refer to without any checking at all hmm

334

00:14:31,860 --> 00:14:29,649

five minutes on the internet a bit of

335

00:14:34,710 --> 00:14:31,870

research will find out because this

336

00:14:36,210 --> 00:14:34,720

man's name comes up often when I'm

337

00:14:38,249 --> 00:14:36,220

talking to New Age people they will

338

00:14:40,559 --> 00:14:38,259

often refer to dr. Emoto as if he's

339

00:14:42,239 --> 00:14:40,569

conducted real research which validates

340

00:14:43,350 --> 00:14:42,249

their point of view that the energies

341

00:14:46,690 --> 00:14:43,360

can have a

342

00:14:49,510 --> 00:14:46,700

he was on water and so on well the

343

00:14:52,330 --> 00:14:49,520

scientists are always cautious in what

344

00:14:55,360 --> 00:14:52,340

they say they say things like he hasn't

345

00:14:57,970 --> 00:14:55,370

published any refereed pages and he

346

00:15:01,090 --> 00:14:57,980

doesn't have a laboratory and his work

347

00:15:03,160 --> 00:15:01,100

has never been verified and it's not

348

00:15:04,990 --> 00:15:03,170

taken very seriously well I say it's

349

00:15:07,420 --> 00:15:05,000

nonsense from start to finish yeah and

350

00:15:10,900 --> 00:15:07,430

it's also fraudulent he became very rich

351
00:15:12,760 --> 00:15:10,910
from this without without any real basis

352
00:15:14,830 --> 00:15:12,770
or or under false pretenses yes you

353
00:15:17,080 --> 00:15:14,840
don't go a bit further and there's more

354
00:15:19,750 --> 00:15:17,090
interesting things here the Crystal

355
00:15:22,150 --> 00:15:19,760
Light bed modality is the ultimate in

356
00:15:23,650 --> 00:15:22,160
life enhancing experience because of the

357
00:15:25,870 --> 00:15:23,660
profound work being done on all levels

358
00:15:28,270 --> 00:15:25,880
of the body uses what we call word salad

359
00:15:30,880 --> 00:15:28,280
of course and then oh hello here comes

360
00:15:32,860 --> 00:15:30,890
another plane it's fun living in the

361
00:15:34,540 --> 00:15:32,870
light the flight puppy now they uses

362
00:15:36,760 --> 00:15:34,550
real internet right it reminds you of

363
00:15:40,240 --> 00:15:36,770

the advances of technology as i said in

364

00:15:44,320 --> 00:15:40,250

castle it says it combines the power of

365

00:15:46,360 --> 00:15:44,330

color and crystal light frequencies ah

366

00:15:48,220 --> 00:15:46,370

now i can i must these are just words

367

00:15:50,860 --> 00:15:48,230

but they just were thrown together yeah

368

00:15:53,350 --> 00:15:50,870

frequencies is another technical word so

369

00:15:55,180 --> 00:15:53,360

how would you technically give give our

370

00:15:57,520 --> 00:15:55,190

audience a good understanding of the

371

00:16:00,160 --> 00:15:57,530

word frequencies or frequency because

372

00:16:02,770 --> 00:16:00,170

this word comes up again and again and

373

00:16:05,350 --> 00:16:02,780

again yes indeed well frequency is a

374

00:16:06,670 --> 00:16:05,360

fundamental physical property that you

375

00:16:08,290 --> 00:16:06,680

can measure frequency means have

376

00:16:10,930 --> 00:16:08,300

frequently something's happening happens

377

00:16:14,050 --> 00:16:10,940

exactly right yeah and the the power

378

00:16:15,640 --> 00:16:14,060

coming to your house the frequency is 50

379

00:16:17,950 --> 00:16:15,650

cycles per second or 50 Hertz because

380

00:16:20,710 --> 00:16:17,960

the voluntary versus 50 times a second

381

00:16:22,240 --> 00:16:20,720

and when I'm speaking to you my voice as

382

00:16:24,490 --> 00:16:22,250

a health spectrum of San some of the

383

00:16:26,860 --> 00:16:24,500

sound is 300 cycles per second or 300

384

00:16:30,329 --> 00:16:26,870

Hertz and the three thousand Hertz bit

385

00:16:32,950 --> 00:16:30,339

in between so that the frequency means

386

00:16:34,840 --> 00:16:32,960

refers to some physical phenomenon not

387

00:16:37,030 --> 00:16:34,850

objective but a phenomenon you can refer

388

00:16:39,550 --> 00:16:37,040

to sound decree further light can refer

389

00:16:41,290 --> 00:16:39,560

to x-rays and hope your holidays you

390

00:16:43,030 --> 00:16:41,300

might have your holidays might have a

391

00:16:45,220 --> 00:16:43,040

frequency of two per year or wednesday

392

00:16:47,770 --> 00:16:45,230

yes so it's really a time interval

393

00:16:49,360 --> 00:16:47,780

between two events that's right when you

394

00:16:52,450 --> 00:16:49,370

when you boil down to it so when they

395

00:16:54,790 --> 00:16:52,460

talk about the frequency it they don't

396

00:16:56,290 --> 00:16:54,800

even does not even refer any what

397

00:16:58,270 --> 00:16:56,300

physical phenomena as weather

398

00:17:00,190 --> 00:16:58,280

slight of ultrasonic vibration together

399

00:17:01,120 --> 00:17:00,200

for the frequent this was a sort of

400

00:17:02,500 --> 00:17:01,130

thing we were getting with the power

401
00:17:05,560 --> 00:17:02,510
balance wristband if you remember that

402
00:17:07,960 --> 00:17:05,570
when they would say it's embedded with

403
00:17:09,730 --> 00:17:07,970
frequencies and the wine Kurt and the

404
00:17:11,380 --> 00:17:09,740
wine car is embedded with frequencies

405
00:17:13,960 --> 00:17:11,390
which were transferred to the wine so

406
00:17:16,000 --> 00:17:13,970
let me look at that sentence embedded

407
00:17:17,980 --> 00:17:16,010
with frequencies does that make any

408
00:17:21,730 --> 00:17:17,990
sense as a slice like this this rock is

409
00:17:24,490 --> 00:17:21,740
embedded with length yeah well just as

410
00:17:26,370 --> 00:17:24,500
meaningful yeah so to say something is

411
00:17:28,870 --> 00:17:26,380
embedded with frequencies as just your

412
00:17:30,490 --> 00:17:28,880
son nonsense it's not a lot of

413
00:17:32,680 --> 00:17:30,500

frequencies is not a noun that you can

414

00:17:34,810 --> 00:17:32,690

use in that application right so you'd

415

00:17:37,300 --> 00:17:34,820

have to click Satan it contains lie to

416

00:17:39,430 --> 00:17:37,310

it it's being vibrated by something or

417

00:17:41,410 --> 00:17:39,440

so something optra something you can't

418

00:17:42,940 --> 00:17:41,420

embed something with frequencies notice

419

00:17:45,220 --> 00:17:42,950

the sentence doesn't make sense that's

420

00:17:47,500 --> 00:17:45,230

right frequencies is a physical

421

00:17:49,480 --> 00:17:47,510

measurement yeah yeah not a phenomenon

422

00:17:52,780 --> 00:17:49,490

yeah so next time someone says that you

423

00:17:54,280 --> 00:17:52,790

did this question is frequencies of what

424

00:17:59,530 --> 00:17:54,290

yes and you know what the answer would

425

00:18:01,060 --> 00:17:59,540

be 0 energy ran in circles but and I

426
00:18:03,010 --> 00:18:01,070
mean you've been at this game for a long

427
00:18:04,540 --> 00:18:03,020
time in a lot longer than I have you

428
00:18:07,600 --> 00:18:04,550
must have come across similar sort of

429
00:18:10,060 --> 00:18:07,610
things where people say the mystical

430
00:18:11,860 --> 00:18:10,070
energies or you've come across claims

431
00:18:15,060 --> 00:18:11,870
with crystals before I would imagine Oh

432
00:18:18,480 --> 00:18:15,070
many times yeah yes usually you just

433
00:18:22,210 --> 00:18:18,490
laugh at them that the hundredth time

434
00:18:23,920 --> 00:18:22,220
the other did I mean we're just looking

435
00:18:27,550 --> 00:18:23,930
at some other pictures taken at the same

436
00:18:29,290 --> 00:18:27,560
the same shop here and one of the other

437
00:18:32,260 --> 00:18:29,300
things they have here is in a big sign

438
00:18:36,400 --> 00:18:32,270

that saying immerse yourself in crystal

439

00:18:39,400 --> 00:18:36,410

light crystal light bed therapy and it

440

00:18:41,230 --> 00:18:39,410

says the book ends as an opens your

441

00:18:42,730 --> 00:18:41,240

chakras there yeah there you go Sacre's

442

00:18:44,710 --> 00:18:42,740

is at least they're not claiming that to

443

00:18:47,350 --> 00:18:44,720

be a scientific term it cleanses an open

444

00:18:49,000 --> 00:18:47,360

chakras from negative negativity and

445

00:18:50,470 --> 00:18:49,010

energy block music nah-ha energy

446

00:18:52,900 --> 00:18:50,480

blockages that's right yeah let's talk

447

00:18:55,650 --> 00:18:52,910

about energy blockages and and and this

448

00:18:58,000 --> 00:18:55,660

this whole thing of negative energy it's

449

00:18:59,740 --> 00:18:58,010

again it's another nonsense isn't it I

450

00:19:01,210 --> 00:18:59,750

mean it maybe they're thinking of a

451

00:19:02,680 --> 00:19:01,220

positive and a negative on a battery

452

00:19:06,010 --> 00:19:02,690

terminal something like that but that

453

00:19:07,930 --> 00:19:06,020

doesn't mean good or better good or bad

454

00:19:09,520 --> 00:19:07,940

no is it could it could mean north or

455

00:19:12,250 --> 00:19:09,530

south or one or two it's just a way to

456

00:19:14,050 --> 00:19:12,260

differentiate isn't exactly yes sir I've

457

00:19:16,480 --> 00:19:14,060

got into trouble on some healing

458

00:19:19,360 --> 00:19:16,490

retreats where the japanese professor

459

00:19:21,130 --> 00:19:19,370

was cleansing our negative energies or

460

00:19:23,050 --> 00:19:21,140

chi oh yeah at the end of the session

461

00:19:26,140 --> 00:19:23,060

you brushed yourself down to scrape away

462

00:19:28,120 --> 00:19:26,150

or the negative Chi off your body and I

463

00:19:30,160 --> 00:19:28,130

had the nerve to us where does it

464

00:19:31,780 --> 00:19:30,170

actually go is that I said is that what

465

00:19:33,940 --> 00:19:31,790

these holes in the floor or for what

466

00:19:35,860 --> 00:19:33,950

does it accumulate under the building

467

00:19:38,260 --> 00:19:35,870

will it come back and haunt us again

468

00:19:42,040 --> 00:19:38,270

later and he looked at me like I was

469

00:19:43,810 --> 00:19:42,050

stupid anyway the next session he was to

470

00:19:45,730 --> 00:19:43,820

now brush all the negative energies of

471

00:19:48,220 --> 00:19:45,740

you and he said where they go we do not

472

00:19:50,560 --> 00:19:48,230

know oh really how about a litany

473

00:19:52,960 --> 00:19:50,570

remembered it so yes this whole concept

474

00:19:54,880 --> 00:19:52,970

of negative energies is a nonsense of

475

00:19:56,680 --> 00:19:54,890

course chakras are nonsense because

476

00:19:58,750 --> 00:19:56,690

they're just a made-up points of the

477

00:20:03,060 --> 00:19:58,760

body just arbitrary I would imagine but

478

00:20:06,730 --> 00:20:03,070

we're chakras and a lot of Ayurvedic

479

00:20:08,830 --> 00:20:06,740

so-called doctrine and so forth comes

480

00:20:12,640 --> 00:20:08,840

from a pre-scientific civilization user

481

00:20:14,980 --> 00:20:12,650

stage years am that so you can't blame

482

00:20:16,210 --> 00:20:14,990

them for making up things like that

483

00:20:18,040 --> 00:20:16,220

because they didn't have a knowledge of

484

00:20:20,380 --> 00:20:18,050

science but in the energy and frequency

485

00:20:22,390 --> 00:20:20,390

a real word well known that he'll

486

00:20:24,670 --> 00:20:22,400

science yeah the next point it makes

487

00:20:27,340 --> 00:20:24,680

here are under benefits lifts your

488

00:20:29,020 --> 00:20:27,350

energy vibration while aligning the

489

00:20:31,800 --> 00:20:29,030

entire chakra system let's look at the

490

00:20:35,860 --> 00:20:31,810

first part lifts your energy vibration

491

00:20:37,540 --> 00:20:35,870

does that make any sense at all so again

492

00:20:39,100 --> 00:20:37,550

we got word salad we just got words

493

00:20:42,100 --> 00:20:39,110

thrown together that sound like they're

494

00:20:45,280 --> 00:20:42,110

from science number sound meaningful but

495

00:20:46,750 --> 00:20:45,290

simply don't make any real sense mmm I

496

00:20:48,640 --> 00:20:46,760

like this one improves all health

497

00:20:50,620 --> 00:20:48,650

conditions that's a big claim that's

498

00:20:52,830 --> 00:20:50,630

right the few yeah if you could if you

499

00:20:55,330 --> 00:20:52,840

look at a medication and read its

500

00:20:57,940 --> 00:20:55,340

description it tells us specifically

501
00:20:59,680 --> 00:20:57,950
what ailments that can hear in a fit

502
00:21:02,950 --> 00:20:59,690
like for example high blood pressure or

503
00:21:04,960 --> 00:21:02,960
gastric reflux but something that would

504
00:21:07,660 --> 00:21:04,970
improve all health conditions wide

505
00:21:09,790 --> 00:21:07,670
acclaim but I deal with one claim here

506
00:21:13,030 --> 00:21:09,800
that i would probably would say would

507
00:21:15,970 --> 00:21:13,040
work benefits feeling deep relaxation

508
00:21:17,470 --> 00:21:15,980
and in a piece i would expect if you go

509
00:21:18,730 --> 00:21:17,480
to one of these sessions and you're

510
00:21:20,290 --> 00:21:18,740
treated well and you lie

511
00:21:24,610 --> 00:21:20,300
on something you think is mystical you

512
00:21:25,810 --> 00:21:24,620
will probably get a relaxation benefit

513
00:21:27,700 --> 00:21:25,820

out of it because you think something

514

00:21:29,549 --> 00:21:27,710

mystical and magical is happening I mean

515

00:21:32,230 --> 00:21:29,559

you get the same thing lying down on a

516

00:21:34,000 --> 00:21:32,240

blow-up bed on a swimming pool I would

517

00:21:35,290 --> 00:21:34,010

expect and be Laura flotation tank

518

00:21:37,210 --> 00:21:35,300

richer don't know whether you have

519

00:21:39,669 --> 00:21:37,220

assessed me my present yes yeah when I

520

00:21:41,919 --> 00:21:39,679

was younger I i tried the flotation

521

00:21:44,970 --> 00:21:41,929

taken i found it restful and peace mine

522

00:21:47,350 --> 00:21:44,980

quite quite pleasant or a message and

523

00:21:48,520 --> 00:21:47,360

indeed absolutely right so this make you

524

00:21:50,650 --> 00:21:48,530

feel better there's no doubt about that

525

00:21:54,010 --> 00:21:50,660

yeah but don't cure illnesses no they

526
00:21:55,390 --> 00:21:54,020
don't they don't so yeah this whole the

527
00:21:57,460 --> 00:21:55,400
other one is the immune system also

528
00:21:59,680 --> 00:21:57,470
stimulates and boosting immune system

529
00:22:04,380 --> 00:21:59,690
well funny enough what really affects

530
00:22:08,049 --> 00:22:06,549
it's something we know all too well on

531
00:22:10,720 --> 00:22:08,059
the places to do that is called

532
00:22:12,790 --> 00:22:10,730
vaccination anything that would help so

533
00:22:18,070 --> 00:22:12,800
yeah I I don't see how lying in a

534
00:22:20,500 --> 00:22:18,080
crystal bed would do that and we got

535
00:22:23,860 --> 00:22:20,510
other word salad here it is a relaxing

536
00:22:25,840 --> 00:22:23,870
rejuvenating repairing and rebalancing

537
00:22:27,910 --> 00:22:25,850
experience of rebalancing is very

538
00:22:29,169 --> 00:22:27,920

important see if you're unbalanced

539

00:22:32,350 --> 00:22:29,179

you'll tend to fall over if they walk

540

00:22:34,210 --> 00:22:32,360

along the hook performance that wouldn't

541

00:22:35,380 --> 00:22:34,220

be any good with it no move your center

542

00:22:37,919 --> 00:22:35,390

of gravity there's another physical

543

00:22:41,710 --> 00:22:37,929

measurement you ms center of mass yeah

544

00:22:44,650 --> 00:22:41,720

so we've got a lot of a lot of these

545

00:22:47,320 --> 00:22:44,660

new-age words popping up here in and it

546

00:22:51,549 --> 00:22:47,330

in the end it's really an abuse of words

547

00:22:54,370 --> 00:22:51,559

that have very powerful meanings in

548

00:22:57,340 --> 00:22:54,380

science and very definite meanings yes

549

00:23:00,160 --> 00:22:57,350

all i can say is that furthering science

550

00:23:01,750 --> 00:23:00,170

education will help to promote this as

551
00:23:03,720 --> 00:23:01,760
clearly shown that the higher the level

552
00:23:06,370 --> 00:23:03,730
of science education their lists that

553
00:23:09,010 --> 00:23:06,380
belief in whoa in the community yeah

554
00:23:10,630 --> 00:23:09,020
benefits everyone you don't need you

555
00:23:13,900 --> 00:23:10,640
know always benefit in your career

556
00:23:15,490 --> 00:23:13,910
perhaps or vocation from science

557
00:23:17,560 --> 00:23:15,500
education but it helps you adapt to

558
00:23:19,540 --> 00:23:17,570
everyday life yeah yeah and it might

559
00:23:22,030 --> 00:23:19,550
help you when you see something like

560
00:23:24,220 --> 00:23:22,040
these words strung together lifts your

561
00:23:27,490 --> 00:23:24,230
energy vibration in you can recognize

562
00:23:29,799 --> 00:23:27,500
that that is a meaningless statement you

563
00:23:31,150 --> 00:23:29,809

might can spend your money on something

564

00:23:32,430 --> 00:23:31,160

that will benefit to you like we

565

00:23:35,190 --> 00:23:32,440

mentioned a massage

566

00:23:37,740 --> 00:23:35,200

or a pleasant holiday yes a dinner with

567

00:23:41,160 --> 00:23:37,750

a friend I'd rather I'd rather have a

568

00:23:43,110 --> 00:23:41,170

dinner with a friend and a crystal the

569

00:23:45,030 --> 00:23:43,120

other thing is crystal light bed therapy

570

00:23:47,160 --> 00:23:45,040

without knowing what it does yeah it's

571

00:23:51,030 --> 00:23:47,170

let's suppose that there is a bit of

572

00:23:53,330 --> 00:23:51,040

crystals and then a clip with lights

573

00:23:56,460 --> 00:23:53,340

under them to illuminate them yeah and

574

00:23:58,110 --> 00:23:56,470

maybe there's a clear plastic surface

575

00:24:00,000 --> 00:23:58,120

that you then lie on so that your body

576

00:24:03,870 --> 00:24:00,010

is exposed to this that would be very

577

00:24:06,170 --> 00:24:03,880

much like a tanning booth do you

578

00:24:09,270 --> 00:24:06,180

remember those he is the term yeah Oh

579

00:24:10,680 --> 00:24:09,280

salon salons yes tanning booths yes I

580

00:24:12,510 --> 00:24:10,690

know they did expose you to ultraviolet

581

00:24:14,550 --> 00:24:12,520

light so you attend quickly and look

582

00:24:17,180 --> 00:24:14,560

attractive yeah yeah well they've been

583

00:24:19,380 --> 00:24:17,190

found to be very hard very hard yeah

584

00:24:20,700 --> 00:24:19,390

increase the chance of melanoma so it

585

00:24:23,790 --> 00:24:20,710

was actually none of them in use anymore

586

00:24:25,560 --> 00:24:23,800

I suspect this is probably behind this

587

00:24:27,330 --> 00:24:25,570

this Chris it would probably be been

588

00:24:30,030 --> 00:24:27,340

lying in some sort of bed with crystals

589

00:24:31,620 --> 00:24:30,040

and blue lights on and then all the

590

00:24:33,990 --> 00:24:31,630

associated claims the crystals have had

591

00:24:36,480 --> 00:24:34,000

a long history in the New Age industry

592

00:24:38,850 --> 00:24:36,490

of mystical meanings and healings and

593

00:24:41,160 --> 00:24:38,860

indeed you can buy books which lists all

594

00:24:44,760 --> 00:24:41,170

the range of crystals and all their

595

00:24:47,310 --> 00:24:44,770

healing modalities or claims that's

596

00:24:50,280 --> 00:24:47,320

right well the Sun they talk about

597

00:24:51,900 --> 00:24:50,290

crystals refracting light and the light

598

00:24:53,160 --> 00:24:51,910

having special properties well of course

599

00:24:54,990 --> 00:24:53,170

people pay a lot of money for diamonds

600

00:24:56,640 --> 00:24:55,000

and other gems that yes that are

601
00:24:58,590 --> 00:24:56,650
crystals and they're cut to certain

602
00:25:03,060 --> 00:24:58,600
angles to refract the light in very

603
00:25:06,090 --> 00:25:03,070
attractive ways but cut glass crystal

604
00:25:07,650 --> 00:25:06,100
glass decanters and goblets and so forth

605
00:25:10,440 --> 00:25:07,660
have a very similar effect that almost

606
00:25:13,020 --> 00:25:10,450
the same remember the very fracked light

607
00:25:14,940 --> 00:25:13,030
assignment and funny thing is that glass

608
00:25:18,990 --> 00:25:14,950
isn't even a crystal it's a name office

609
00:25:21,270 --> 00:25:19,000
yeah yeah so there if the refraction of

610
00:25:23,340 --> 00:25:21,280
light that they claim for crystals it is

611
00:25:25,440 --> 00:25:23,350
not actually specific to crystals and

612
00:25:28,410 --> 00:25:25,450
snowing and the amorphous materials as

613
00:25:30,330 --> 00:25:28,420

well so sorry so there we re there's a

614

00:25:32,400 --> 00:25:30,340

whole lot of interesting claims to look

615

00:25:33,780 --> 00:25:32,410

out there that's just looking another

616

00:25:36,180 --> 00:25:33,790

photograph from the shop now we've got

617

00:25:38,190 --> 00:25:36,190

arrange it like crystal lights and

618

00:25:41,010 --> 00:25:38,200

crystal this and crystal that the same

619

00:25:44,100 --> 00:25:41,020

shop offers psychic readings and all

620

00:25:46,030 --> 00:25:44,110

sorts of things like them I have here a

621

00:25:49,360 --> 00:25:46,040

couple of other examples of crystals

622

00:25:51,460 --> 00:25:49,370

being used for whoo when is this salt

623

00:25:54,700 --> 00:25:51,470

shaker here here told Himalayan crystal

624

00:25:56,830 --> 00:25:54,710

skulls laying crystal salt I'm shaking

625

00:26:01,030 --> 00:25:56,840

it you pay a lot of money that has pink

626
00:26:04,030 --> 00:26:01,040
in color oh yeah hmm so that's another

627
00:26:07,800 --> 00:26:04,040
exploitation is here the purest salt on

628
00:26:10,510 --> 00:26:07,810
earth how about that doesn't ground

629
00:26:12,490 --> 00:26:10,520
granules yes beautiful well of course

630
00:26:14,490 --> 00:26:12,500
salt and sugar are crystalline if you

631
00:26:16,750 --> 00:26:14,500
look at them on a fine scale yeah yeah

632
00:26:18,370 --> 00:26:16,760
but of course once you eat them they

633
00:26:21,460 --> 00:26:18,380
dissolve in the water and then yeah

634
00:26:24,550 --> 00:26:21,470
become just an ionized solution so so

635
00:26:27,250 --> 00:26:24,560
much for the crystals and of course

636
00:26:28,360 --> 00:26:27,260
every few years that the New Age

637
00:26:30,340 --> 00:26:28,370
movement comes out with a different

638
00:26:32,500 --> 00:26:30,350

product that i can sell that they can

639

00:26:34,840 --> 00:26:32,510

sell for example i can remesh it i can

640

00:26:37,600 --> 00:26:34,850

remember when they were selling mud from

641

00:26:39,520 --> 00:26:37,610

the bottom of a swiss lake yes your eyes

642

00:26:41,860 --> 00:26:39,530

rub on your face different mixes of

643

00:26:43,390 --> 00:26:41,870

years 10 years ago here Elaine I'm sure

644

00:26:45,280 --> 00:26:43,400

a third of you Elaine but or maybe

645

00:26:47,020 --> 00:26:45,290

Himalayan is just trained e to say

646

00:26:47,980 --> 00:26:47,030

something's from that region and the

647

00:26:51,280 --> 00:26:47,990

other one was in the end earth or

648

00:26:52,720 --> 00:26:51,290

charcoal Sam would really dug up this

649

00:26:55,990 --> 00:26:52,730

ancient charcoal with mystical

650

00:26:58,750 --> 00:26:56,000

properties on you so that for you now

651
00:27:01,000 --> 00:26:58,760
the other object i have here yup oh wow

652
00:27:02,830 --> 00:27:01,010
a salt crystal lamp it's a lab it's got

653
00:27:05,470 --> 00:27:02,840
a power cord coming out of it a try and

654
00:27:08,770 --> 00:27:05,480
it it's very large maybe maybe where's 2

655
00:27:11,500 --> 00:27:08,780
kilograms yeah and it's hollowed out and

656
00:27:13,840 --> 00:27:11,510
it's got a light glow oh yeah and that

657
00:27:17,110 --> 00:27:13,850
causes healing ions to be emitted by the

658
00:27:20,560 --> 00:27:17,120
fight that's it that's right when would

659
00:27:23,590 --> 00:27:20,570
think that it's just a lump of yellowish

660
00:27:25,240 --> 00:27:23,600
salt that puts out a nice pleasant di

661
00:27:27,430 --> 00:27:25,250
pleasant like it's very good for a night

662
00:27:29,890 --> 00:27:27,440
light because it helps you to see the

663
00:27:31,240 --> 00:27:29,900

stairs in the dark yes or for that but

664

00:27:34,000 --> 00:27:31,250

it's claimed healing properties all

665

00:27:36,940 --> 00:27:34,010

really afraid not so crystals are used

666

00:27:39,190 --> 00:27:36,950

in many different things if he began to

667

00:27:41,620 --> 00:27:39,200

an alternative shop you'll probably find

668

00:27:44,590 --> 00:27:41,630

10 different applications of crystals

669

00:27:46,360 --> 00:27:44,600

being claimed to just to solve various

670

00:27:49,810 --> 00:27:46,370

things don't think so thank you very

671

00:27:50,980 --> 00:27:49,820

much Ian Bryce for your insights I'm

672

00:27:53,500 --> 00:27:50,990

sure we've learned a lot more about

673

00:27:55,030 --> 00:27:53,510

nonsense words and crystals and

674

00:27:57,220 --> 00:27:55,040

frequencies and energies and things like

675

00:27:59,200 --> 00:27:57,230

that and a bit more about real physics I

676

00:28:03,220 --> 00:27:59,210

had a bit more cut real physics

677

00:28:05,139 --> 00:28:03,230

now back to joe alabaster also spotted

678

00:28:08,080 --> 00:28:05,149

in newtown was a chalkboard in the

679

00:28:09,399 --> 00:28:08,090

window of a natural cosmetics shop it's

680

00:28:11,320 --> 00:28:09,409

a little difficult for me to read

681

00:28:13,630 --> 00:28:11,330

verbatim and fully capture the tone of

682

00:28:15,279 --> 00:28:13,640

what's been written so let you know when

683

00:28:18,909 --> 00:28:15,289

we hit all caps writing multiple

684

00:28:23,649 --> 00:28:18,919

underlines of maleic talc is closely

685

00:28:25,480 --> 00:28:23,659

related to asbestos talc particles have

686

00:28:28,440 --> 00:28:25,490

been shown to cause tumors in the

687

00:28:30,760 --> 00:28:28,450

ovaries and lungs of cancer victims

688

00:28:33,870 --> 00:28:30,770

talcum is often their number one

689

00:28:36,340 --> 00:28:33,880

ingredient in cosmetics its cost is

690

00:28:39,460 --> 00:28:36,350

approximately fifty dollars that's

691

00:28:42,460 --> 00:28:39,470

Underland per metric ton that's

692

00:28:44,950 --> 00:28:42,470

capitalized then we've got dollar sign

693

00:28:48,450 --> 00:28:44,960

dollar sign door son dollar sign or caps

694

00:28:50,889 --> 00:28:48,460

do the maths exclamation marks

695

00:28:55,029 --> 00:28:50,899

nanoparticles are the ticking time bomb

696

00:28:57,460 --> 00:28:55,039

of this generation along with GMO these

697

00:29:01,570 --> 00:28:57,470

particles cross the brain / blood

698

00:29:04,180 --> 00:29:01,580

barrier capitals a billion nanoparticles

699

00:29:07,560 --> 00:29:04,190

fit on the head of a pin the rave of

700

00:29:12,519 --> 00:29:07,570

invisible sunscreens is not so glamorous

701
00:29:15,490 --> 00:29:12,529
capitals we don't underline use Z zinc

702
00:29:19,120 --> 00:29:15,500
in any double underline foundations or

703
00:29:22,750 --> 00:29:19,130
products lots of exclamation marks all

704
00:29:25,480 --> 00:29:22,760
caps knowledge if not applied becomes a

705
00:29:28,840 --> 00:29:25,490
burden and then we've got a couple of

706
00:29:30,880 --> 00:29:28,850
little X's as kisses at the end wow so

707
00:29:33,340 --> 00:29:30,890
that's a rather scary claim that talc

708
00:29:36,010 --> 00:29:33,350
causes cancer and I'm very happy to

709
00:29:37,779 --> 00:29:36,020
reassure you that it is a myth it's an

710
00:29:41,860 --> 00:29:37,789
interesting one though as it did

711
00:29:43,930 --> 00:29:41,870
originally have some basis in fact the

712
00:29:47,230 --> 00:29:43,940
shop window sign claims that talc is

713
00:29:48,610 --> 00:29:47,240

closely related to asbestos this sounds

714

00:29:50,139 --> 00:29:48,620

rather alarming given that most

715

00:29:52,180 --> 00:29:50,149

Australians are quite familiar with

716

00:29:54,250 --> 00:29:52,190

asbestos fiber inhalation related

717

00:29:57,240 --> 00:29:54,260

illnesses including malignant lung

718

00:30:00,010 --> 00:29:57,250

cancer mesothelioma and asbestosis and

719

00:30:01,600 --> 00:30:00,020

the controversy surrounding the closing

720

00:30:05,080 --> 00:30:01,610

down of the asbestos mining and

721

00:30:07,810 --> 00:30:05,090

manufacturing industries as far as

722

00:30:10,600 --> 00:30:07,820

mineral composition goes tuck is fairly

723

00:30:12,810 --> 00:30:10,610

closely related to asbestos talc is

724

00:30:15,090 --> 00:30:12,820

hydrated magnesium silicate

725

00:30:17,330 --> 00:30:15,100

asbestos constitutes a set of six

726

00:30:20,850 --> 00:30:17,340

naturally occurring silicate minerals

727

00:30:24,060 --> 00:30:20,860

however this does not suggest that talc

728

00:30:27,149 --> 00:30:24,070

is danger a parallel claim would be to

729

00:30:28,710 --> 00:30:27,159

suggest that water h₂o is dangerous

730

00:30:32,480 --> 00:30:28,720

because it has a similar chemical

731

00:30:35,850 --> 00:30:32,490

composition to hydrogen peroxide h₂o₂

732

00:30:38,220 --> 00:30:35,860

unlike water hydrogen peroxide is an

733

00:30:40,680 --> 00:30:38,230

oxidant corrosive and creates localized

734

00:30:43,799 --> 00:30:40,690

capillary embolism on contact with human

735

00:30:45,960 --> 00:30:43,809

skin that one extra oxygen molecule

736

00:30:48,990 --> 00:30:45,970

resulting in an unstable peroxide bond

737

00:30:51,990 --> 00:30:49,000

makes a heck of a lot of difference so

738

00:30:54,480 --> 00:30:52,000

where's the fact because of their

739

00:30:56,909 --> 00:30:54,490

similar composition talc deposits are

740

00:30:59,789 --> 00:30:56,919

often found close to asbestos deposits

741

00:31:02,669 --> 00:30:59,799

as such talc deposits can be

742

00:31:05,279 --> 00:31:02,679

contaminated with asbestos while the

743

00:31:07,470 --> 00:31:05,289

talc itself is very much innocuous talc

744

00:31:09,379 --> 00:31:07,480

products produced prior to nineteen

745

00:31:13,639 --> 00:31:09,389

seventy three were sometimes

746

00:31:15,690 --> 00:31:13,649

contaminated with asbestos in 1973

747

00:31:18,269 --> 00:31:15,700

regulation of talc products was

748

00:31:20,369 --> 00:31:18,279

introduced resulting in prior risks

749

00:31:23,730 --> 00:31:20,379

associated with contaminated talcum

750

00:31:25,440 --> 00:31:23,740

powder being abolished modern tout

751
00:31:27,659 --> 00:31:25,450
refining processes are stringently

752
00:31:29,999 --> 00:31:27,669
monitored and there's no risk of lung

753
00:31:34,860 --> 00:31:30,009
disease associated with modern talcum

754
00:31:36,990 --> 00:31:34,870
powder or talc products the ovarian

755
00:31:39,299 --> 00:31:37,000
cancer claims are based on studies which

756
00:31:41,850 --> 00:31:39,309
found an increased ovarian cancer risk

757
00:31:45,450 --> 00:31:41,860
associated with the use of talcum powder

758
00:31:47,940 --> 00:31:45,460
but relied on self-reports over a large

759
00:31:49,710 --> 00:31:47,950
time period and as such were unable to

760
00:31:52,259 --> 00:31:49,720
measure either the purity of the talc

761
00:31:55,320 --> 00:31:52,269
used by participants nor the frequency

762
00:31:56,999 --> 00:31:55,330
and dose at which it was applied as such

763
00:31:59,730 --> 00:31:57,009

no causal link has been drawn between

764

00:32:03,200 --> 00:31:59,740

talcum ovarian cancer and studies have

765

00:32:06,570 --> 00:32:03,210

been deemed inconclusive now

766

00:32:08,940 --> 00:32:06,580

nanoparticles there is no known health

767

00:32:11,990 --> 00:32:08,950

risk associated with products containing

768

00:32:13,830 --> 00:32:12,000

nanoparticles applied to the skin in

769

00:32:15,930 --> 00:32:13,840

2013 the Therapeutic Goods

770

00:32:18,240 --> 00:32:15,940

Administration published a review of

771

00:32:20,279 --> 00:32:18,250

relevant studies which concluded that

772

00:32:22,799 --> 00:32:20,289

nanoparticles do not penetrate the skin

773

00:32:25,960 --> 00:32:22,809

beyond the outermost layer systemic

774

00:32:27,790 --> 00:32:25,970

absorption of nanoparticles is unlikely

775

00:32:30,310 --> 00:32:27,800

link oxide nanoparticles in particular

776

00:32:32,890 --> 00:32:30,320

have been studied and when exposed in

777

00:32:35,200 --> 00:32:32,900

vivo to a human immune cells the immune

778

00:32:38,530 --> 00:32:35,210

cells absorb the nanoparticles and broke

779

00:32:40,360 --> 00:32:38,540

them down claims regarding the dangers

780

00:32:43,180 --> 00:32:40,370

of nanoparticles and skin products are

781

00:32:45,070 --> 00:32:43,190

not based on any credible evidence nor

782

00:32:47,260 --> 00:32:45,080

for that matter is the other suggestions

783

00:32:49,600 --> 00:32:47,270

slipped in on the side that GMOs pose a

784

00:32:52,960 --> 00:32:49,610

health risk to humans despite public

785

00:32:54,700 --> 00:32:52,970

successes of anti GMO campaigners you

786

00:32:56,470 --> 00:32:54,710

know I get the impression that the

787

00:32:58,660 --> 00:32:56,480

people who run the natural cosmetics

788

00:33:01,750 --> 00:32:58,670

store very likely believe that they are

789

00:33:03,190 --> 00:33:01,760

doing good I could be cynical and come

790

00:33:05,500 --> 00:33:03,200

to the conclusion that they're knowingly

791

00:33:07,480 --> 00:33:05,510

using non evidence-based fear tactics to

792

00:33:09,370 --> 00:33:07,490

sell their products but that's something

793

00:33:11,170 --> 00:33:09,380

I really come across when encountering

794

00:33:13,480 --> 00:33:11,180

people who manufacture products based

795

00:33:16,060 --> 00:33:13,490

around a naturalistic fallacy and false

796

00:33:18,400 --> 00:33:16,070

dangers I think that it's far more

797

00:33:20,110 --> 00:33:18,410

likely that perhaps at some point the

798

00:33:22,420 --> 00:33:20,120

store owners came across misinformation

799

00:33:24,580 --> 00:33:22,430

on the dangers of talc and nanoparticles

800

00:33:26,200 --> 00:33:24,590

and took it as fact and then built a

801
00:33:29,470 --> 00:33:26,210
business around something that they felt

802
00:33:31,180 --> 00:33:29,480
was going to be good for people likewise

803
00:33:33,220 --> 00:33:31,190
the vast majority of alternative

804
00:33:35,500 --> 00:33:33,230
medicine practitioners crystal sellers

805
00:33:38,020 --> 00:33:35,510
and other assorted were peddlers strike

806
00:33:41,560 --> 00:33:38,030
me as genuinely wanting to and believing

807
00:33:43,780 --> 00:33:41,570
that they are doing good does this

808
00:33:46,120 --> 00:33:43,790
excuse the fact that their practices are

809
00:33:49,090 --> 00:33:46,130
not based on solid scientific evidence

810
00:33:50,950 --> 00:33:49,100
well not at all I feel that everybody

811
00:33:52,920 --> 00:33:50,960
has a responsibility not to spread

812
00:33:55,000 --> 00:33:52,930
misinformation on pseudoscience

813
00:33:56,800 --> 00:33:55,010

particularly when such can cause people

814

00:33:59,290 --> 00:33:56,810

to forego evidence-based medical

815

00:34:02,200 --> 00:33:59,300

assistance or advice be seriously out of

816

00:34:06,460 --> 00:34:02,210

pocket buying magic beans or place faith

817

00:34:08,500 --> 00:34:06,470

in myths rather than facts however I

818

00:34:09,910 --> 00:34:08,510

still try to remain charitable in

819

00:34:11,890 --> 00:34:09,920

dealing with people who make these

820

00:34:14,890 --> 00:34:11,900

claims they're really made with

821

00:34:16,600 --> 00:34:14,900

malicious intent likewise I hope that

822

00:34:18,310 --> 00:34:16,610

people are able to understand that when

823

00:34:19,990 --> 00:34:18,320

we questioned their claims and asked for

824

00:34:23,650 --> 00:34:20,000

evidence we're not doing so to be

825

00:34:25,690 --> 00:34:23,660

malicious smug or dogmatic anyhow I

826

00:34:27,850 --> 00:34:25,700

think that it's worth keeping an eye out

827

00:34:30,100 --> 00:34:27,860

when you're passing by shop windows or

828

00:34:31,960 --> 00:34:30,110

public notice boards particularly in

829

00:34:34,210 --> 00:34:31,970

areas with higher concentrations of

830

00:34:36,470 --> 00:34:34,220

alternative lifestyles alternative

831

00:34:38,450 --> 00:34:36,480

practitioners and the like

832

00:34:40,280 --> 00:34:38,460

it can make for a good opportunity to

833

00:34:42,710 --> 00:34:40,290

keep on top of the sorts of claims being

834

00:34:45,440 --> 00:34:42,720

made and prompt some interesting fact

835

00:34:47,840 --> 00:34:45,450

finding and discussion for more evidence

836

00:34:50,690 --> 00:34:47,850

please you can find my blog at evidence

837

00:34:52,760 --> 00:34:50,700

please net evidence please is also on

838

00:35:09,010 --> 00:34:52,770

Facebook and you can contact me on

839

00:35:13,810 --> 00:35:10,990

having a baby is a very special

840

00:35:15,640 --> 00:35:13,820

experience for any young parent but

841

00:35:18,220 --> 00:35:15,650

imagine what it would be like to live

842

00:35:20,860 --> 00:35:18,230

with the fear that at any time that baby

843

00:35:24,070 --> 00:35:20,870

could become seriously ill and even die

844

00:35:26,380 --> 00:35:24,080

from preventable disease this was the

845

00:35:28,390 --> 00:35:26,390

everyday reality for our grandparents

846

00:35:31,270 --> 00:35:28,400

and the countless generations before

847

00:35:33,190 --> 00:35:31,280

them the vaccination chronicles is a

848

00:35:36,160 --> 00:35:33,200

documentary film by Richard Saunders

849

00:35:38,830 --> 00:35:36,170

with stories from real people who know

850

00:35:40,900 --> 00:35:38,840

firsthand what it's like to see family

851
00:35:44,590 --> 00:35:40,910
members suffer from diseases we hardly

852
00:35:46,780 --> 00:35:44,600
hear about today it's a powerful message

853
00:35:49,630 --> 00:35:46,790
for today's parents wondering about

854
00:35:52,300 --> 00:35:49,640
vaccinating their own children the

855
00:35:54,850 --> 00:35:52,310
documentary is free to view and show in

856
00:35:58,000 --> 00:35:54,860
public without seeking permission just

857
00:36:01,030 --> 00:35:58,010
google the vaccination chronicles for

858
00:36:04,120 --> 00:36:01,040
the youtube link you can also order the

859
00:36:06,390 --> 00:36:04,130
DVD of the documentary autographed by

860
00:36:09,190 --> 00:36:06,400
Richard Saunders for only twelve dollars

861
00:36:12,490 --> 00:36:09,200
this covers production and postage to

862
00:36:15,310 --> 00:36:12,500
anywhere in the world the DVD includes

863
00:36:17,680 --> 00:36:15,320

extra interviews archival newspaper

864

00:36:22,360 --> 00:36:17,690

reports and other features from the

865

00:36:24,090 --> 00:36:22,370

1940s and 1950s the artwork for the DVD

866

00:36:32,530 --> 00:36:24,100

in the cover are included on the DVD

867

00:36:35,410 --> 00:36:32,540

itself just visit w WX on TV to order

868

00:36:38,020 --> 00:36:35,420

your copy once you have the DVD it's

869

00:36:40,990 --> 00:36:38,030

your job to copy it and pass it along to

870

00:36:43,690 --> 00:36:41,000

as many people as you wish they in turn

871

00:36:46,090 --> 00:36:43,700

are encouraged to do the same the

872

00:36:57,260 --> 00:36:46,100

vaccination chronicles a must-see for

873

00:37:02,400 --> 00:36:59,700

welcome to a week in science from our

874

00:37:04,860 --> 00:37:02,410

iOS bringing you the science you need to

875

00:37:07,430 --> 00:37:04,870

know if your reality could use a few

876

00:37:09,690 --> 00:37:07,440

improvements why not augment it

877

00:37:11,820 --> 00:37:09,700

augmented reality is an emerging

878

00:37:17,640 --> 00:37:11,830

technology that's here to inform guide

879

00:37:20,190 --> 00:37:17,650

and entertain us in the real world when

880

00:37:22,800 --> 00:37:20,200

you think about real experiences virtual

881

00:37:25,380 --> 00:37:22,810

reality probably comes to mind but why

882

00:37:27,300 --> 00:37:25,390

create a virtual reality when you could

883

00:37:30,210 --> 00:37:27,310

simply adjust the world in which you

884

00:37:33,300 --> 00:37:30,220

live all you need for augmented reality

885

00:37:35,880 --> 00:37:33,310

is a camera and a display then you can

886

00:37:38,670 --> 00:37:35,890

add elements even interactive elements

887

00:37:40,320 --> 00:37:38,680

to a real world view smartphones and

888

00:37:43,290 --> 00:37:40,330

tablets are the obvious device for

889

00:37:45,990 --> 00:37:43,300

augmented reality using GPS or other

890

00:37:48,000 --> 00:37:46,000

landmarks augmented reality apps can

891

00:37:50,720 --> 00:37:48,010

help you navigate give you useful

892

00:37:54,000 --> 00:37:50,730

information or change your surroundings

893

00:37:56,970 --> 00:37:54,010

what about a dedicated display you could

894

00:37:59,400 --> 00:37:56,980

have unobtrusive glasses or a futuristic

895

00:38:03,650 --> 00:37:59,410

headset either way this type of

896

00:38:07,050 --> 00:38:03,660

augmented reality can change your world

897

00:38:08,430 --> 00:38:07,060

as you can expect the commercial

898

00:38:11,600 --> 00:38:08,440

applications have been well and truly

899

00:38:14,370 --> 00:38:11,610

noticed advertisements can come to life

900

00:38:16,890 --> 00:38:14,380

leaping from the page or screen to offer

901
00:38:19,020 --> 00:38:16,900
more information and content or show a

902
00:38:20,730 --> 00:38:19,030
preview and trying on clothing and

903
00:38:23,310 --> 00:38:20,740
accessories might be a thing of the past

904
00:38:26,280 --> 00:38:23,320
so if changing reality takes your fancy

905
00:38:31,140 --> 00:38:26,290
here's for fast facts about augmented

906
00:38:33,720 --> 00:38:31,150
reality the very first augmented reality

907
00:38:37,560 --> 00:38:33,730
head mounted display was developed at

908
00:38:40,230 --> 00:38:37,570
Harvard University in 1968 but the term

909
00:38:42,930 --> 00:38:40,240
augmented reality wasn't coined until

910
00:38:45,150 --> 00:38:42,940
nineteen ninety Google started beta

911
00:38:49,380 --> 00:38:45,160
testing their augmented reality headset

912
00:38:51,450 --> 00:38:49,390
Google glass in 2013 and researchers in

913
00:38:54,390 --> 00:38:51,460

the US are developing a way to display

914

00:38:55,830 --> 00:38:54,400
information directly to the retina it

915

00:38:57,690 --> 00:38:55,840
would look like the information was

916

00:39:00,060 --> 00:38:57,700
floating in front of you

917

00:39:03,150 --> 00:39:00,070
that's it for this week in science for

918

00:39:08,460 --> 00:39:03,160
more information on augmented reality go

919

00:39:12,000 --> 00:39:08,470
to the RI oh's website RI aus org dot a

920

00:39:14,850 --> 00:39:12,010
you follow us on twitter and our IRS and

921

00:39:29,700 --> 00:39:14,860
like us on facebook I'm Tanya Meyer and

922

00:39:31,830 --> 00:39:29,710
we'll catch you next week on Maynard com

923

00:39:34,140 --> 00:39:31,840
dono you we should call for a sound

924

00:39:35,760 --> 00:39:34,150
effects solo this is where Tim gives me

925

00:39:38,040 --> 00:39:35,770
a couple of hours worked by getting a

926

00:39:41,400 --> 00:39:38,050

sound effect solo together Tim call for

927

00:39:51,020 --> 00:39:41,410

a sound effect solo a pussycat firing a

928

00:39:57,390 --> 00:39:54,810

there you go Tim oh man you managed to

929

00:40:11,960 --> 00:39:57,400

find that who knew someone had recorded

930

00:40:26,520 --> 00:40:15,960

it's the raw skeptic report with Heidi

931

00:40:29,359 --> 00:40:26,530

Robertson hello everyone on Tuesday

932

00:40:33,230 --> 00:40:29,369

afternoon this week March seventeenth

933

00:40:36,480 --> 00:40:33,240

Riley John Hughes at just four weeks old

934

00:40:38,849 --> 00:40:36,490

died from pertussis commonly known as

935

00:40:42,720 --> 00:40:38,859

whooping cough in Princess Margaret

936

00:40:44,849 --> 00:40:42,730

Hospital in Perth Riley was too young to

937

00:40:47,190 --> 00:40:44,859

have had his first pertussis vaccine

938

00:40:50,640 --> 00:40:47,200

which is given between six to eight

939

00:40:52,339 --> 00:40:50,650

weeks of age his is the first death from

940

00:40:57,690 --> 00:40:52,349

whooping cough in western australia

941

00:41:00,599 --> 00:40:57,700

since 2011 despite enduring an

942

00:41:03,000 --> 00:41:00,609

unimaginable loss Riley's mum and dad

943

00:41:05,730 --> 00:41:03,010

have set up a Facebook page called light

944

00:41:09,349 --> 00:41:05,740

for Riley in order to raise awareness of

945

00:41:11,760 --> 00:41:09,359

this dreadful disease Riley's dad says

946

00:41:14,400 --> 00:41:11,770

due to the significant media attention

947

00:41:17,160 --> 00:41:14,410

that the tragic passing of our beloved

948

00:41:20,099 --> 00:41:17,170

son has drawn we've established this

949

00:41:22,770 --> 00:41:20,109

page what will come from it yet I'm not

950

00:41:24,870 --> 00:41:22,780

entirely sure we're desperate to ensure

951
00:41:27,359 --> 00:41:24,880
the passing of our child has not been in

952
00:41:29,250 --> 00:41:27,369
vain and to try and assist other

953
00:41:33,260 --> 00:41:29,260
families who may be potentially

954
00:41:35,970 --> 00:41:33,270
suffering from similar circumstances on

955
00:41:37,650 --> 00:41:35,980
Thursday the nineteenth of March The

956
00:41:43,260 --> 00:41:37,660
Daily Telegraph published the following

957
00:41:45,870 --> 00:41:43,270
exclusive report quote free vaccine for

958
00:41:48,720 --> 00:41:45,880
pregnant mums to beat deadly whooping

959
00:41:51,000 --> 00:41:48,730
cough every pregnant woman in New South

960
00:41:53,010 --> 00:41:51,010
Wales will receive a free whooping cough

961
00:41:55,320 --> 00:41:53,020
vaccine the new south wales government

962
00:41:58,500 --> 00:41:55,330
has announced in response to the latest

963
00:42:00,960 --> 00:41:58,510

infant death Health Minister Jillian

964

00:42:03,210 --> 00:42:00,970

Skinner announced the move exclusively

965

00:42:04,200 --> 00:42:03,220

to the Daily Telegraph after news broke

966

00:42:06,390 --> 00:42:04,210

that for

967

00:42:09,720 --> 00:42:06,400

cold Riley Hughes died on Tuesday in

968

00:42:11,700 --> 00:42:09,730

Perth New South Wales will offer these

969

00:42:13,530 --> 00:42:11,710

vaccines to all pregnant women in New

970

00:42:15,420 --> 00:42:13,540

South Wales in their third trimester

971

00:42:17,250 --> 00:42:15,430

free of charge and we are currently

972

00:42:19,380 --> 00:42:17,260

awaiting new guidelines from the

973

00:42:22,170 --> 00:42:19,390

National Health and Medical Research

974

00:42:25,680 --> 00:42:22,180

Council in order to progress miss

975

00:42:27,240 --> 00:42:25,690

Skinner said health experts fear

976

00:42:29,849 --> 00:42:27,250

Australia is on the verge of another

977

00:42:32,130 --> 00:42:29,859

whooping cough epidemic with numbers up

978

00:42:35,339 --> 00:42:32,140

three hundred percent on last year's

979

00:42:37,500 --> 00:42:35,349

figures the daily and sunday telegraph's

980

00:42:40,410 --> 00:42:37,510

have been campaigning through the no job

981

00:42:43,050 --> 00:42:40,420

no play campaign to raise vaccination

982

00:42:45,180 --> 00:42:43,060

rates in New South Wales there have been

983

00:42:46,859 --> 00:42:45,190

two thousand eight hundred and ninety

984

00:42:51,390 --> 00:42:46,869

three cases of whooping cough in

985

00:42:54,329 --> 00:42:51,400

Australia so far this year with 1221 of

986

00:42:56,130 --> 00:42:54,339

those in New South Wales the new

987

00:42:58,260 --> 00:42:56,140

announcement follows Victoria and

988

00:43:00,180 --> 00:42:58,270

Queensland lead to offer the free

989

00:43:03,450 --> 00:43:00,190

booster to pregnant women in the third

990

00:43:05,790 --> 00:43:03,460

trimester previously babies have been

991

00:43:08,609 --> 00:43:05,800

given the vaccine at six weeks for

992

00:43:10,050 --> 00:43:08,619

months and six months but a booster

993

00:43:12,270 --> 00:43:10,060

given in the last trimester of pregnancy

994

00:43:15,450 --> 00:43:12,280

is now thought to offer the best

995

00:43:18,089 --> 00:43:15,460

protection for newborns professor peter

996

00:43:20,240 --> 00:43:18,099

mcintyre director national center for

997

00:43:22,710 --> 00:43:20,250

immunization research and surveillance

998

00:43:26,460 --> 00:43:22,720

said pregnancy shots were offered in the

999

00:43:29,790 --> 00:43:26,470

UK in 2012 after a spate of baby deaths

1000

00:43:33,089 --> 00:43:29,800

and as a result numbers decreased by

1001
00:43:35,579 --> 00:43:33,099
ninety percent director of communicable

1002
00:43:38,310 --> 00:43:35,589
disease branch of New South Wales health

1003
00:43:42,960 --> 00:43:38,320
dr. Vickie Shepherd said New South Wales

1004
00:43:45,240 --> 00:43:42,970
was do another peak after 2 2009 to 2012

1005
00:43:48,660 --> 00:43:45,250
outbreak that claimed the lives of two

1006
00:43:50,579 --> 00:43:48,670
new south wales babies we've been

1007
00:43:52,410 --> 00:43:50,589
watching very closely with the numbers

1008
00:43:55,530 --> 00:43:52,420
rising each month and we haven't had a

1009
00:43:59,640 --> 00:43:55,540
peak since 2011 so we are due for

1010
00:44:02,010 --> 00:43:59,650
another dr. Shepherd said end quote the

1011
00:44:04,290 --> 00:44:02,020
vaccine in the third trimester has a

1012
00:44:07,260 --> 00:44:04,300
couple of advantages both for the baby

1013
00:44:09,120 --> 00:44:07,270

and the mother the mother is afforded

1014

00:44:11,670 --> 00:44:09,130

some protection from contracting the

1015

00:44:13,650 --> 00:44:11,680

disease herself and in having the

1016

00:44:16,440 --> 00:44:13,660

vaccine in the later stages of the third

1017

00:44:17,430 --> 00:44:16,450

trimester she also passes a good level

1018

00:44:19,559 --> 00:44:17,440

of protection

1019

00:44:22,349 --> 00:44:19,569

the disease across the placenta to the

1020

00:44:24,839 --> 00:44:22,359

baby hopefully enough to last them until

1021

00:44:29,099 --> 00:44:24,849

they can receive their first vaccine at

1022

00:44:31,740 --> 00:44:29,109

six to eight weeks of age bringing back

1023

00:44:34,650 --> 00:44:31,750

this vaccine free in the wake of Riley's

1024

00:44:36,920 --> 00:44:34,660

tragic death is very positive news for

1025

00:44:39,510 --> 00:44:36,930

families across New South Wales

1026
00:44:42,089 --> 00:44:39,520
Queensland and Victoria already have

1027
00:44:44,280 --> 00:44:42,099
this initiative in place and on Friday

1028
00:44:47,400 --> 00:44:44,290
western australia announced they too

1029
00:44:49,290 --> 00:44:47,410
will be bringing it in let's hope the

1030
00:44:51,900 --> 00:44:49,300
rest of the states and territories now

1031
00:44:54,359 --> 00:44:51,910
follow suit and recognize the latest

1032
00:44:56,609 --> 00:44:54,369
research and evidence supporting

1033
00:45:00,839 --> 00:44:56,619
pertussis vaccination in the third

1034
00:45:04,880 --> 00:45:00,849
trimester of pregnancy at the northern

1035
00:45:11,849 --> 00:45:04,890
rivers vaccination supporters website

1036
00:45:14,190 --> 00:45:11,859
wwn rvs info we have Novak's no visit

1037
00:45:16,670 --> 00:45:14,200
Flyers you can print out for anyone who

1038
00:45:20,010 --> 00:45:16,680

wants them who is expecting a new baby

1039

00:45:22,020 --> 00:45:20,020

these remind family and friends to get

1040

00:45:25,530 --> 00:45:22,030

up to date with their boosters prior to

1041

00:45:28,170 --> 00:45:25,540

visiting a new baby just go to the

1042

00:45:30,660 --> 00:45:28,180

resources tab on the website to print

1043

00:45:38,700 --> 00:45:30,670

out either a color or black-and-white

1044

00:45:59,230 --> 00:45:38,710

version that's ww nrvs info thanks

1045

00:46:04,760 --> 00:46:01,970

thank you for listening to the skeptic

1046

00:46:06,920 --> 00:46:04,770

zone and as I said at the top of the

1047

00:46:09,020 --> 00:46:06,930

show I hope Sydney people i hope i can

1048

00:46:11,840 --> 00:46:09,030

meet you at the Australian skeptics

1049

00:46:14,710 --> 00:46:11,850

dinner meeting on the twenty-eighth of

1050

00:46:17,510 --> 00:46:14,720

march the ride Eastwood Leagues Club

1051
00:46:20,600 --> 00:46:17,520
with our special guest dr. brad Makai

1052
00:46:23,870 --> 00:46:20,610
talking about embarrassing bodies and

1053
00:46:27,500 --> 00:46:23,880
medical madness promises to be a great

1054
00:46:30,530 --> 00:46:27,510
evening head to ww skeptics comdata you

1055
00:46:33,050 --> 00:46:30,540
to get your ticket and thanks to joe

1056
00:46:35,990 --> 00:46:33,060
alabaster Heidi Robertson and a special

1057
00:46:38,600 --> 00:46:36,000
guest Ian Bryce for helping to put

1058
00:46:40,280 --> 00:46:38,610
together this week's episode Ian Bryce

1059
00:46:43,040 --> 00:46:40,290
is such an interesting man my friends

1060
00:46:45,890 --> 00:46:43,050
he's been a skeptical activist and

1061
00:46:47,600 --> 00:46:45,900
investigator for many many years and he

1062
00:46:50,000 --> 00:46:47,610
knows his electronics and his

1063
00:46:52,580 --> 00:46:50,010

engineering and his physics inside out I

1064

00:46:54,800 --> 00:46:52,590

always go to him when I have these sort

1065

00:46:56,570 --> 00:46:54,810

of questions thank you to those people

1066

00:46:58,190 --> 00:46:56,580

who have been commenting on the videos

1067

00:47:01,550 --> 00:46:58,200

that we've been posting up on the

1068

00:47:04,310 --> 00:47:01,560

skeptics own Facebook page didn't do one

1069

00:47:06,290 --> 00:47:04,320

this week because I didn't seem a nerd I

1070

00:47:08,300 --> 00:47:06,300

didn't see Joe and it's more fun to do

1071

00:47:10,160 --> 00:47:08,310

it with a colleague I think but enough

1072

00:47:12,400 --> 00:47:10,170

people like those little video so I

1073

00:47:14,960 --> 00:47:12,410

think what will keep turning them out

1074

00:47:17,690 --> 00:47:14,970

coming up in the coming weeks on the

1075

00:47:21,440 --> 00:47:17,700

skeptic zone I hope to bring you news

1076
00:47:24,410 --> 00:47:21,450
about a more formal test of the premium

1077
00:47:26,180 --> 00:47:24,420
wine card yes the wine car do you rub

1078
00:47:28,460 --> 00:47:26,190
the card against the glass of wine and

1079
00:47:31,070 --> 00:47:28,470
it magically tastes better well that's

1080
00:47:33,560 --> 00:47:31,080
the claim anyway and Australian skeptics

1081
00:47:36,110 --> 00:47:33,570
are going to put this too am a rigorous

1082
00:47:38,030 --> 00:47:36,120
scientific test a couple of weeks ago on

1083
00:47:39,560 --> 00:47:38,040
the skeptic zone we had a fun test with

1084
00:47:43,430 --> 00:47:39,570
wine card at skeptics in the pub in

1085
00:47:45,770 --> 00:47:43,440
Sydney where people got to try out the

1086
00:47:48,470 --> 00:47:45,780
card for themselves pretty soon we'll be

1087
00:47:52,670 --> 00:47:48,480
doing a proper rigorous test will the

1088
00:47:56,600 --> 00:47:52,680

wine card work well if I was a betting

1089

00:47:58,250 --> 00:47:56,610

man hmm and thank you for those people

1090

00:48:02,210 --> 00:47:58,260

of course who contribute to the skeptic

1091

00:48:03,650 --> 00:48:02,220

zone via paypal its skeptic zone TV your

1092

00:48:06,079 --> 00:48:03,660

contributions are not only

1093

00:48:09,079 --> 00:48:06,089

they're actually needed to help to keep

1094

00:48:13,069 --> 00:48:09,089

show going so we do thank you very much

1095

00:48:15,079 --> 00:48:13,079

and before I go if you are listen to the

1096

00:48:16,520 --> 00:48:15,089

skeptics guide to the universe podcast

1097

00:48:18,529 --> 00:48:16,530

with my friends from the skeptics guide

1098

00:48:20,750 --> 00:48:18,539

you would have heard me as a guest rogue

1099

00:48:22,549 --> 00:48:20,760

this week if you don't listen to the

1100

00:48:24,170 --> 00:48:22,559

skeptics guide to the universe it might

1101

00:48:27,890 --> 00:48:24,180

be fun to download the latest episode

1102

00:48:30,230 --> 00:48:27,900

the here Mia chip in but for this week

1103

00:48:36,859 --> 00:48:30,240

this is Richard Saunders signing off

1104

00:48:38,529 --> 00:48:36,869

from Sydney Australia you've been

1105

00:48:42,020 --> 00:48:38,539

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1106

00:48:45,140 --> 00:48:42,030

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00:48:48,980 --> 00:48:45,150

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00:48:51,289 --> 00:48:48,990

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00:48:54,010 --> 00:48:51,299

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00:49:02,930 --> 00:49:00,089

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00:49:06,410 --> 00:49:02,940

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00:49:08,750 --> 00:49:06,420

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00:49:10,460 --> 00:49:08,760

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1116

00:49:12,529 --> 00:49:10,470

views and opinions expressed on the

1117

00:49:15,220 --> 00:49:12,539

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