

1
00:00:00,000 --> 00:00:04,440
so there I was the other day just

2
00:00:01,970 --> 00:00:06,330
sitting at home enjoying me afternoon

3
00:00:04,440 --> 00:00:11,070
watching a little bit of TV catching up

4
00:00:06,330 --> 00:00:13,530
on some work writing some notes and I

5
00:00:11,070 --> 00:00:15,269
thought to myself that's funny my right

6
00:00:13,529 --> 00:00:18,419
shoulder seems to be a little bit sore

7
00:00:15,269 --> 00:00:21,719
well nothing to worry about a couple of

8
00:00:18,420 --> 00:00:24,480
hours go by keep doing some work then oh

9
00:00:21,719 --> 00:00:27,000
it's like somebody broke into the house

10
00:00:24,480 --> 00:00:30,660
with a sledgehammer and whacked me in

11
00:00:27,000 --> 00:00:37,109
the arm for some reason my shoulder just

12
00:00:30,660 --> 00:00:40,079
went from calm to pain not good very not

13
00:00:37,109 --> 00:00:45,210
good my lost mobility couldn't raise my

14
00:00:40,079 --> 00:00:50,250
arm and that night was just sleepless

15
00:00:45,210 --> 00:00:52,980
with pain really not good so I go to the

16
00:00:50,250 --> 00:00:54,210
doctor as soon as I walk in and he asked

17
00:00:52,979 --> 00:00:56,398
me to raise my arm and I can't he said

18
00:00:54,210 --> 00:01:00,259
ah you've you've hurt your deltoid

19
00:00:56,399 --> 00:01:05,549
muscle okay great going home an x-ray so

20
00:01:00,259 --> 00:01:08,129
x-ray fine if a lady says now I want you

21
00:01:05,549 --> 00:01:11,000
to raise your arm right up here and ah I

22
00:01:08,129 --> 00:01:16,408
know it's okay we'll try another way

23
00:01:11,000 --> 00:01:18,299
there's a point to this story so next

24
00:01:16,409 --> 00:01:19,890
day the results came back I couldn't be

25
00:01:18,299 --> 00:01:21,479
there I couldn't go to the doctor to get

26
00:01:19,890 --> 00:01:25,069
the results because I was doing the TV

27
00:01:21,478 --> 00:01:28,728
studio there I was in the TV studio

28
00:01:25,069 --> 00:01:31,408
completely doped up with painkillers

29

00:01:28,728 --> 00:01:35,819
flying what a great day it was I don't

30
00:01:31,409 --> 00:01:36,990
know what was happening ah but to the

31
00:01:35,819 --> 00:01:39,118
audience when they see it at home

32
00:01:36,989 --> 00:01:41,699
they'll never know I'll never know that

33
00:01:39,118 --> 00:01:44,819
I was in pain and I couldn't really move

34
00:01:41,700 --> 00:01:46,259
my arm but that's TV for you there is a

35
00:01:44,819 --> 00:01:49,319
point of this story I we're getting

36
00:01:46,259 --> 00:01:50,489
there so a few days pass and I'm finally

37
00:01:49,319 --> 00:01:53,250
get back to the doctor to get the

38
00:01:50,489 --> 00:01:55,649
results back and he says well you know

39
00:01:53,250 --> 00:01:57,118
it's a tiny little bit of arthritis in

40
00:01:55,649 --> 00:01:59,460
your shoulder or it could be calcium

41
00:01:57,118 --> 00:02:01,379
buildup what couple years ago I had a

42
00:01:59,459 --> 00:02:03,209
calcium buildup which was fixed so it's

43
00:02:01,379 --> 00:02:05,310

probably a little reoccurrence of that

44

00:02:03,209 --> 00:02:07,699

but the main problem is soft tissue

45

00:02:05,310 --> 00:02:11,009

damage which is of course min time I've

46

00:02:07,700 --> 00:02:11,810

strained or pulled or the deltoid muscle

47

00:02:11,008 --> 00:02:15,348

up there

48

00:02:11,810 --> 00:02:17,959

ouch fine writes me out a prescription

49

00:02:15,348 --> 00:02:19,609

for some anti-inflammatory tablets great

50

00:02:17,959 --> 00:02:21,620

that'll help calm things down a little

51

00:02:19,610 --> 00:02:23,780

bit and even today I'm getting more

52

00:02:21,620 --> 00:02:26,330

mobility back so that's great go up to

53

00:02:23,780 --> 00:02:28,550

the pharmacy and the same shopping mall

54

00:02:26,330 --> 00:02:29,989

where the doctor is and while i'm

55

00:02:28,550 --> 00:02:31,819

waiting for the prescription to be

56

00:02:29,989 --> 00:02:37,219

filled out i'm just looking around the

57

00:02:31,818 --> 00:02:39,079

shelves and or ear candles so I mean

58
00:02:37,219 --> 00:02:42,080
there's a big box of them I pull out a

59
00:02:39,080 --> 00:02:44,450
packet and I'm looking at them I can't

60
00:02:42,080 --> 00:02:46,630
believe this can't believe it up comes

61
00:02:44,449 --> 00:02:49,879
the friendly pharmacist assistant

62
00:02:46,629 --> 00:02:52,909
nice-looking young bloke and says can I

63
00:02:49,879 --> 00:02:55,789
help you and I say what I can't believe

64
00:02:52,909 --> 00:02:57,919
you're selling these the next five

65
00:02:55,789 --> 00:02:59,598
minutes was a case of him trying to

66
00:02:57,919 --> 00:03:01,098
convince me but they good and they work

67
00:02:59,598 --> 00:03:03,500
and me trying to convince him that

68
00:03:01,098 --> 00:03:05,000
they're rubbish and they're dangerous in

69
00:03:03,500 --> 00:03:09,530
the end he said well you're entitled to

70
00:03:05,000 --> 00:03:14,150
your opinion fuming I left the pharmacy

71
00:03:09,530 --> 00:03:16,789
a-frame picked up my prescription so the

72
00:03:14,150 --> 00:03:19,909
point to this story the point to this

73
00:03:16,789 --> 00:03:24,078
story and as we've said on the skeptic

74
00:03:19,909 --> 00:03:28,479
zone before you cannot trust advice that

75
00:03:24,079 --> 00:03:32,840
you receive in an Australian pharmacy

76
00:03:28,479 --> 00:03:34,608
it's sad but true if you can walk into a

77
00:03:32,840 --> 00:03:38,120
pharmacy and get advice that's sticking

78
00:03:34,609 --> 00:03:44,000
a candle in your ear is a healthy thing

79
00:03:38,120 --> 00:03:47,349
to do then you simply cannot trust the

80
00:03:44,000 --> 00:03:52,750
advice you receive in an Australian

81
00:03:47,349 --> 00:04:00,189
pharmacy the skeptic Zone episode number

82
00:03:52,750 --> 00:04:00,189
142 for the ninth of July starts now

83
00:04:04,620 --> 00:04:12,360
welcome to the skeptic zone the podcast

84
00:04:07,780 --> 00:04:12,360
from Australia for science and reason

85
00:04:21,990 --> 00:04:27,879
yes it's the skeptic zone and that

86

00:04:25,689 --> 00:04:31,060
introduction was a little tribute to

87
00:04:27,879 --> 00:04:32,680
George rub I like the way but George

88
00:04:31,060 --> 00:04:35,800
does these programs not that I'm going

89
00:04:32,680 --> 00:04:39,699
to copy him too much but you know coming

90
00:04:35,800 --> 00:04:42,040
up on this week's show Maynard with his

91
00:04:39,699 --> 00:04:43,599
spooky action now this is a very

92
00:04:42,040 --> 00:04:47,670
interesting interview he's got lined up

93
00:04:43,600 --> 00:04:49,750
for us he's going to talk to a laughter

94
00:04:47,670 --> 00:04:50,920
expert and you can probably hear me

95
00:04:49,750 --> 00:04:59,170
getting ready in the background to do

96
00:04:50,920 --> 00:05:02,439
this no this right my little after

97
00:04:59,170 --> 00:05:05,640
machine about the benefits of laughter

98
00:05:02,439 --> 00:05:09,219
now made me a bit of a skeptical guy

99
00:05:05,639 --> 00:05:11,589
I've always thought that people

100
00:05:09,220 --> 00:05:13,240

spruiking the health benefits of simply

101

00:05:11,589 --> 00:05:16,000

laughing we're not really on the right

102

00:05:13,240 --> 00:05:18,220

track but I think this lady is she's not

103

00:05:16,000 --> 00:05:20,259

claiming too much she's more or less

104

00:05:18,220 --> 00:05:22,000

saying a good laugh is just good for you

105

00:05:20,259 --> 00:05:24,189

makes you feel better and helps you get

106

00:05:22,000 --> 00:05:27,069

through life and sounds like good advice

107

00:05:24,189 --> 00:05:31,000

to me anyway make up your own mind when

108

00:05:27,069 --> 00:05:34,509

Maynard speaks to Helena Grover from the

109

00:05:31,000 --> 00:05:37,240

laughter strategies well might be good

110

00:05:34,509 --> 00:05:39,759

for a laugh anyway and following that

111

00:05:37,240 --> 00:05:42,220

dr. ray cheer apports now Richie was

112

00:05:39,759 --> 00:05:45,370

recently in Melbourne where she visited

113

00:05:42,220 --> 00:05:48,280

the Walter and Eliza Hall institute a

114

00:05:45,370 --> 00:05:51,759

very famous Institute and spoke to PhD

115
00:05:48,279 --> 00:05:55,259
student Linda hutto about cancer

116
00:05:51,759 --> 00:05:57,699
research and which is really right up

117
00:05:55,259 --> 00:06:00,399
rach's alley because she's into her cell

118
00:05:57,699 --> 00:06:03,430
biology and heart research so it's for

119
00:06:00,399 --> 00:06:05,289
her was a fascinating look into some

120
00:06:03,430 --> 00:06:08,110
other people doing similar sorts of

121
00:06:05,290 --> 00:06:09,400
research and for us well we reap the

122
00:06:08,110 --> 00:06:11,830
benefits with a very interesting

123
00:06:09,399 --> 00:06:13,679
interview and we also find out about

124
00:06:11,829 --> 00:06:16,829
fresh science

125
00:06:13,680 --> 00:06:19,978
and following on from that we have dr.

126
00:06:16,829 --> 00:06:23,959
rachey on the radio and I think she has

127
00:06:19,978 --> 00:06:27,689
a bit of a rant really coming up soon

128
00:06:23,959 --> 00:06:30,120
well okay enough from me it's time to

129
00:06:27,689 --> 00:06:31,800
run downstairs it's cold today in Sydney

130
00:06:30,120 --> 00:06:32,970
it's still cold today in Sydney next

131
00:06:31,800 --> 00:06:34,530
week it's going to be boiling hot in Las

132
00:06:32,970 --> 00:06:37,199
Vegas but right now it's cold today in

133
00:06:34,529 --> 00:06:39,839
Sydney hot coffee that'll do me today

134
00:06:37,199 --> 00:06:42,439
hot coffee and I'll let you enjoy the

135
00:06:39,839 --> 00:06:42,439
skeptics in

136
00:06:55,709 --> 00:07:02,939
here's Maynard spooky action at a

137
00:07:00,430 --> 00:07:02,939
distance

138
00:07:03,310 --> 00:07:08,680
I guess you've all heard by now that the

139
00:07:05,740 --> 00:07:10,629
world's first tickle spa allegedly is

140
00:07:08,680 --> 00:07:12,430
opening in Spain where people can get

141
00:07:10,629 --> 00:07:14,259
tickled and feel better about it so I

142
00:07:12,430 --> 00:07:17,709
thought let's talk to someone whose job

143

00:07:14,259 --> 00:07:19,389
is to be a laughter strategist it's a

144
00:07:17,709 --> 00:07:22,620
Helen Grover hi Helen Grover how are you

145
00:07:19,389 --> 00:07:25,509
good good man that its Helene cries okay

146
00:07:22,620 --> 00:07:28,259
Helene Grove opens got an e on the end

147
00:07:25,509 --> 00:07:32,250
of it there no no range it's of course

148
00:07:28,259 --> 00:07:34,810
now as a professional laughter ologist

149
00:07:32,250 --> 00:07:38,019
what is your professional title that's

150
00:07:34,810 --> 00:07:40,329
the therapist trainer named it I think I

151
00:07:38,019 --> 00:07:42,969
work in a broader spectrum now of humor

152
00:07:40,329 --> 00:07:45,430
and fun and play and so it's actually

153
00:07:42,970 --> 00:07:46,990
categorize me actually now one of the

154
00:07:45,430 --> 00:07:49,060
one of the specialty services you offer

155
00:07:46,990 --> 00:07:51,460
which I've got to ask you about up the

156
00:07:49,060 --> 00:07:54,610
front is do you do what they call ego

157
00:07:51,459 --> 00:07:57,759

management and what exactly is that ego

158

00:07:54,610 --> 00:08:00,160

management yes I've seen as we you can

159

00:07:57,759 --> 00:08:03,819

try me occur well I've seen that on

160

00:08:00,160 --> 00:08:05,050

very laughter laughter therapy I've seen

161

00:08:03,819 --> 00:08:06,730

that mention to something that can be

162

00:08:05,050 --> 00:08:08,170

done and I'm just wondering what what

163

00:08:06,730 --> 00:08:09,370

that is is that some sort of laughter

164

00:08:08,170 --> 00:08:11,530

counseling you give to people

165

00:08:09,370 --> 00:08:15,910

individually or what would not have

166

00:08:11,529 --> 00:08:18,399

found it in my work all of my websites

167

00:08:15,910 --> 00:08:20,350

and things because ego management is a

168

00:08:18,399 --> 00:08:22,329

oh gosh that's putting all sorts of

169

00:08:20,350 --> 00:08:24,189

connotations on it already right it

170

00:08:22,329 --> 00:08:26,379

makes it sound like you somebody's got

171

00:08:24,189 --> 00:08:29,829

an overinflated ego then we have to

172
00:08:26,379 --> 00:08:32,110
manage that and I very very much my

173
00:08:29,829 --> 00:08:34,449
belief is about validating people and

174
00:08:32,110 --> 00:08:38,259
not doing anything that will take away

175
00:08:34,450 --> 00:08:40,840
their sense of self-worth so how hard is

176
00:08:38,259 --> 00:08:42,759
it to earn a living seriously with

177
00:08:40,840 --> 00:08:44,769
something that is based on laughter

178
00:08:42,759 --> 00:08:47,439
because you know you've got to be

179
00:08:44,769 --> 00:08:49,480
serious about it but you got to be funny

180
00:08:47,440 --> 00:08:51,820
too and you've got to know when to swim

181
00:08:49,480 --> 00:08:53,649
swap between the two you said it you

182
00:08:51,820 --> 00:08:55,390
said it and that is such I did a

183
00:08:53,649 --> 00:08:58,179
workshop yesterday actually that was

184
00:08:55,389 --> 00:09:00,159
like that very challenging it is because

185
00:08:58,179 --> 00:09:02,049
the that's why I've broadened it and

186
00:09:00,159 --> 00:09:04,059
it's not just last because at the end of

187
00:09:02,049 --> 00:09:06,399
the day laughter only comes at the end

188
00:09:04,059 --> 00:09:08,289
of everything else when we've seen the

189
00:09:06,399 --> 00:09:11,590
humor we've had fun when we're feeling

190
00:09:08,289 --> 00:09:14,459
good so and laughter so is at the end so

191
00:09:11,590 --> 00:09:16,780
to try and blend creating a laughter

192
00:09:14,460 --> 00:09:18,610
environment it's about to me

193
00:09:16,779 --> 00:09:20,049
it's about changing people's attitudes

194
00:09:18,610 --> 00:09:22,240
about the way they feel the way they

195
00:09:20,049 --> 00:09:26,049
think how they can use humor on a

196
00:09:22,240 --> 00:09:28,419
day-to-day basis how to incorporate some

197
00:09:26,049 --> 00:09:31,269
fun into your life because fun is the

198
00:09:28,419 --> 00:09:34,769
key see laughter only happens you can

199
00:09:31,269 --> 00:09:37,840
fake it which is helps to you know like

200

00:09:34,769 --> 00:09:39,340
people didn't want it was wonder what

201
00:09:37,840 --> 00:09:41,950
I'm on about when I suddenly come out

202
00:09:39,340 --> 00:09:43,720
with a bunch of laughing so we can fake

203
00:09:41,950 --> 00:09:45,879
that because that helps too and it takes

204
00:09:43,720 --> 00:09:48,940
our mind off other things and it changes

205
00:09:45,879 --> 00:09:52,240
our perceptions but it's also we need to

206
00:09:48,940 --> 00:09:54,820
have fun we need to play and the minute

207
00:09:52,240 --> 00:09:57,549
we do that then the last is more

208
00:09:54,820 --> 00:09:59,920
spontaneous and Helene what do you think

209
00:09:57,549 --> 00:10:01,990
of the idea of a tickle spa because the

210
00:09:59,919 --> 00:10:04,389
laughter you get from being tickled is

211
00:10:01,990 --> 00:10:06,850
as a physical stimulation as opposed to

212
00:10:04,389 --> 00:10:09,069
just mental stimulation and what's the

213
00:10:06,850 --> 00:10:10,659
difference there Oh huge actually it's

214
00:10:09,070 --> 00:10:13,000

funny I'm glad you found about this

215

00:10:10,659 --> 00:10:15,309
because when i did my life to therapy

216

00:10:13,000 --> 00:10:17,049
training in the states my teacher who

217

00:10:15,309 --> 00:10:18,729
was this clinical psychologist who'd

218

00:10:17,049 --> 00:10:21,399
been working in the field of humor and

219

00:10:18,730 --> 00:10:23,769
laughter for years she taught us and i

220

00:10:21,399 --> 00:10:26,620
totally agree with her tickling is

221

00:10:23,769 --> 00:10:28,449
lovely if someone asks for it like i had

222

00:10:26,620 --> 00:10:30,940
a lady yesterday in that workshop you

223

00:10:28,450 --> 00:10:33,580
said oh i love being tickled I ask

224

00:10:30,940 --> 00:10:36,520
people to tickle me so in that in that

225

00:10:33,580 --> 00:10:38,830
way that's fine but if you suddenly

226

00:10:36,519 --> 00:10:40,419
somebody feeling sad or down or they're

227

00:10:38,830 --> 00:10:42,370
not you know they're not in a good space

228

00:10:40,419 --> 00:10:43,629
and suddenly someone should all right I

229
00:10:42,370 --> 00:10:45,429
know we're not going to make you laugh

230
00:10:43,629 --> 00:10:47,379
and you pounce on them and start

231
00:10:45,429 --> 00:10:50,199
tickling them that's very intrusive

232
00:10:47,379 --> 00:10:52,629
that's attacking on their body you know

233
00:10:50,200 --> 00:10:55,420
it's like babies you know people go oh

234
00:10:52,629 --> 00:10:57,340
which equals a baby goo goo goo and the

235
00:10:55,419 --> 00:10:59,079
baby you know when they start waving

236
00:10:57,340 --> 00:11:02,080
their arms about because they don't have

237
00:10:59,080 --> 00:11:05,950
language yet if they're saying look away

238
00:11:02,080 --> 00:11:07,450
leave me alone I don't like this and of

239
00:11:05,950 --> 00:11:09,490
course we laugh when we're tickled

240
00:11:07,450 --> 00:11:11,620
because it's a spontaneous reaction like

241
00:11:09,490 --> 00:11:14,200
you've just said you know we're tickled

242
00:11:11,620 --> 00:11:15,700
that the body responds immediately to

243
00:11:14,200 --> 00:11:17,980
laughter but it doesn't mean that we're

244
00:11:15,700 --> 00:11:19,570
always comfortable about it the Spanish

245
00:11:17,980 --> 00:11:21,430
get into all sorts of things do you

246
00:11:19,570 --> 00:11:23,080
think this this whole tickle spa thing

247
00:11:21,429 --> 00:11:24,549
could take off worldwide I mean would

248
00:11:23,080 --> 00:11:27,670
you like this I mean this could rob you

249
00:11:24,549 --> 00:11:29,169
of a bit of an income no no no

250
00:11:27,669 --> 00:11:31,719
and with that sort of thing because I do

251
00:11:29,169 --> 00:11:33,759
a lot more of one on one now because to

252
00:11:31,720 --> 00:11:36,250
me it's very much about people finding

253
00:11:33,759 --> 00:11:38,439
where their own personal humorous I

254
00:11:36,250 --> 00:11:40,330
think others I've been doing this sort

255
00:11:38,440 --> 00:11:43,240
of work now for 20 years and I've I've

256
00:11:40,330 --> 00:11:46,840
discovered that you can't just expect

257

00:11:43,240 --> 00:11:49,029
everyone to approach the idea of for

258
00:11:46,840 --> 00:11:51,460
them to laugh at any in the same way

259
00:11:49,029 --> 00:11:53,649
everyone's different so we have to look

260
00:11:51,460 --> 00:11:55,840
at that so for someone to go to a tickle

261
00:11:53,649 --> 00:11:58,179
star look I could imagine doing it

262
00:11:55,840 --> 00:12:00,759
myself you know but what does that spur

263
00:11:58,179 --> 00:12:03,339
include does it mean having Mossad does

264
00:12:00,759 --> 00:12:04,750
it mean Steve's does it mean you know

265
00:12:03,340 --> 00:12:06,910
while someone's giving you a massage

266
00:12:04,750 --> 00:12:09,730
they giving you a tickle I'm not sure

267
00:12:06,909 --> 00:12:13,299
what this is Spanish back tickles fast

268
00:12:09,730 --> 00:12:14,920
look I can tell you now Helene Helene

269
00:12:13,299 --> 00:12:16,509
and by the way and what is the

270
00:12:14,919 --> 00:12:18,189
physiological response that is the

271
00:12:16,509 --> 00:12:20,590

benefit from laughter either from

272

00:12:18,190 --> 00:12:22,980

tickling or other sorts of laughter well

273

00:12:20,590 --> 00:12:26,500

laughter of course produces the body is

274

00:12:22,980 --> 00:12:28,570

produces chemicals the first line of

275

00:12:26,500 --> 00:12:31,299

action is a whole bunch of chemicals

276

00:12:28,570 --> 00:12:34,120

that get produced in the body but you

277

00:12:31,299 --> 00:12:36,669

know I have to say something because to

278

00:12:34,120 --> 00:12:38,379

me the best way to walk my talk is to

279

00:12:36,669 --> 00:12:41,349

walk my talk and to prove what I'm

280

00:12:38,379 --> 00:12:43,080

saying now I know of I know that most

281

00:12:41,350 --> 00:12:45,879

research and studies have shown that

282

00:12:43,080 --> 00:12:49,810

laughter is beneficial it's meant to

283

00:12:45,879 --> 00:12:52,029

reduce pain well physically it may not

284

00:12:49,809 --> 00:12:54,009

because I some I have arthritis and

285

00:12:52,029 --> 00:12:56,199

sometimes I have terrible pain and I've

286
00:12:54,009 --> 00:12:59,679
sit there and do my last two things and

287
00:12:56,200 --> 00:13:01,840
it the only thing that it may do was

288
00:12:59,679 --> 00:13:04,629
laughter does is create a buffer in your

289
00:13:01,840 --> 00:13:06,340
brain so it blanks off the the

290
00:13:04,629 --> 00:13:08,950
negativity of things and you change

291
00:13:06,340 --> 00:13:11,200
you're not focusing on the plane laughs

292
00:13:08,950 --> 00:13:12,850
is also gives you cardiovascular system

293
00:13:11,200 --> 00:13:14,950
a good workout you need it's good for

294
00:13:12,850 --> 00:13:17,379
heart you know case your hard work out

295
00:13:14,950 --> 00:13:19,660
gets blood pumping in you in you know

296
00:13:17,379 --> 00:13:22,990
faster and you're breathing in a lot of

297
00:13:19,659 --> 00:13:24,730
air and so the physiological benefits I

298
00:13:22,990 --> 00:13:28,299
think a long being documented and

299
00:13:24,730 --> 00:13:30,519
researched maybe I'm finding that we're

300
00:13:28,299 --> 00:13:33,250
giving it a little bit too much as far

301
00:13:30,519 --> 00:13:36,279
as that's concerned but by the same

302
00:13:33,250 --> 00:13:38,860
token it's great for taking our minds of

303
00:13:36,279 --> 00:13:41,110
our problems and making us change our

304
00:13:38,860 --> 00:13:43,839
mind so and as I said we need

305
00:13:41,110 --> 00:13:46,360
to me it's about we need to develop the

306
00:13:43,839 --> 00:13:49,930
sense of humor because it's easy for me

307
00:13:46,360 --> 00:13:51,639
to say to you look may not have a life

308
00:13:49,929 --> 00:13:53,469
go on you know and you might be you

309
00:13:51,639 --> 00:13:54,789
might have lost the favorite person in

310
00:13:53,470 --> 00:13:56,649
your life and you might be feeling

311
00:13:54,789 --> 00:13:59,169
really down and you're not going to do

312
00:13:56,649 --> 00:14:01,570
it so I have to find the ways and means

313
00:13:59,169 --> 00:14:03,639
to make you feel better and it does not

314

00:14:01,570 --> 00:14:06,490
mean you know I might be well you know

315
00:14:03,639 --> 00:14:09,490
it can happen but so everyone responds

316
00:14:06,490 --> 00:14:11,560
differently and I've learned that we

317
00:14:09,490 --> 00:14:13,659
need to take people as individuals we

318
00:14:11,559 --> 00:14:14,739
really do look lame there's one thing

319
00:14:13,659 --> 00:14:16,449
you meant a couple of things you

320
00:14:14,740 --> 00:14:18,220
mentioned there now so it may be a

321
00:14:16,450 --> 00:14:19,930
distraction much the same is just

322
00:14:18,220 --> 00:14:22,420
acupuncture may be off in a distraction

323
00:14:19,929 --> 00:14:24,009
yes yes and you also said that laughter

324
00:14:22,419 --> 00:14:26,588
is extremely good at helping us change

325
00:14:24,009 --> 00:14:29,559
our minds what do what do you mean there

326
00:14:26,589 --> 00:14:33,010
oh that to make important well I've

327
00:14:29,559 --> 00:14:35,289
noticed that look even in the worst of

328
00:14:33,009 --> 00:14:37,509

dire conditions you know I went to a

329

00:14:35,289 --> 00:14:41,199

really bad time and I see my partner

330

00:14:37,509 --> 00:14:43,828

died suddenly and I you know it's a

331

00:14:41,200 --> 00:14:46,810

grief process for me still ongoing now

332

00:14:43,828 --> 00:14:49,179

one of the things during the worst of it

333

00:14:46,809 --> 00:14:51,819

is it was the russian orthodox cathedral

334

00:14:49,179 --> 00:14:55,448

funeral which is a foreign place for me

335

00:14:51,820 --> 00:14:57,790

and very very serious very sunburned and

336

00:14:55,448 --> 00:14:59,769

and the choirs are charging in the

337

00:14:57,789 --> 00:15:02,019

charging and all of that and i was

338

00:14:59,769 --> 00:15:03,370

sitting there holding my friends has 11

339

00:15:02,019 --> 00:15:04,990

friends holding my hand the other one

340

00:15:03,370 --> 00:15:08,759

sort of rubbing my tears and all that

341

00:15:04,990 --> 00:15:11,320

and i was feeling really bad now and

342

00:15:08,759 --> 00:15:14,379

then I thought to myself this is you

343
00:15:11,320 --> 00:15:17,170
know I need to something and then I had

344
00:15:14,379 --> 00:15:19,389
a thought I watched the priests wagon I

345
00:15:17,169 --> 00:15:22,259
was all dressed in a long black thing

346
00:15:19,389 --> 00:15:25,059
with a thing every shoulder like a

347
00:15:22,259 --> 00:15:26,769
mantle and he's waving this incense

348
00:15:25,059 --> 00:15:30,250
thing around and I just thought to

349
00:15:26,769 --> 00:15:32,259
myself oh my god a beaded pregnant woman

350
00:15:30,250 --> 00:15:35,740
weight winning it tablecloths and waving

351
00:15:32,259 --> 00:15:38,169
of burning handbag yeah now nobody knew

352
00:15:35,740 --> 00:15:40,419
that was running through my thoughts but

353
00:15:38,169 --> 00:15:42,419
that helped to lighten me up in that

354
00:15:40,419 --> 00:15:45,250
moment if it gave me an internal laugh

355
00:15:42,419 --> 00:15:46,870
now it was not being disrespectful it

356
00:15:45,250 --> 00:15:49,089
wasn't anything but it certainly helped

357
00:15:46,870 --> 00:15:51,339
me to code and I did the Simon you know

358
00:15:49,089 --> 00:15:53,860
my mother when I sounds bits of humor in

359
00:15:51,339 --> 00:15:56,290
that because to me they were

360
00:15:53,860 --> 00:16:00,190
little moments of coping mechanism and

361
00:15:56,289 --> 00:16:02,289
it wasn't Ben it wasn't in it wasn't

362
00:16:00,190 --> 00:16:04,600
inflicting it on anyone else it wasn't

363
00:16:02,289 --> 00:16:07,208
imposing anywhere wasn't but it was just

364
00:16:04,600 --> 00:16:09,790
my own in a world so sometimes you know

365
00:16:07,208 --> 00:16:12,219
a little bit of humor in a place where

366
00:16:09,789 --> 00:16:14,110
we I've had people tell me in workshops

367
00:16:12,220 --> 00:16:16,149
that you know they've had the most jolly

368
00:16:14,110 --> 00:16:18,278
funerals and what have you that helped

369
00:16:16,149 --> 00:16:21,250
the whole family lighten up and bear the

370
00:16:18,278 --> 00:16:23,320
pain of it more readily so that's it

371

00:16:21,250 --> 00:16:25,629
that's the deepest level of where we're

372
00:16:23,320 --> 00:16:28,360
hurting we're human that's why laughter

373
00:16:25,629 --> 00:16:29,708
is not always the thing to do I mean if

374
00:16:28,360 --> 00:16:31,778
I'd have said there and suddenly burst

375
00:16:29,708 --> 00:16:34,028
out laughing it was a been dreadful but

376
00:16:31,778 --> 00:16:36,338
my internal human mechanism worked for

377
00:16:34,028 --> 00:16:38,828
me and it's the same with other areas

378
00:16:36,339 --> 00:16:42,300
another area that I've put into the

379
00:16:38,828 --> 00:16:45,250
whole prospect of laughing is gratitude

380
00:16:42,299 --> 00:16:47,469
if we're grateful for what is happening

381
00:16:45,250 --> 00:16:49,778
in our lives we feel good if we feel

382
00:16:47,470 --> 00:16:51,190
good we can laugh more I mean some they

383
00:16:49,778 --> 00:16:52,958
are me totally grateful to live in

384
00:16:51,190 --> 00:16:55,600
Australia I mean to me it's like my

385
00:16:52,958 --> 00:16:57,399

daily doesn't feel good you know and I

386

00:16:55,600 --> 00:17:00,339

live near the ocean so as a double dose

387

00:16:57,399 --> 00:17:03,100

and so it's about how we view the world

388

00:17:00,339 --> 00:17:05,019

how we view things around us and then we

389

00:17:03,100 --> 00:17:07,689

can feel good it's about feeling good

390

00:17:05,019 --> 00:17:10,720

because laughter will is an expression

391

00:17:07,689 --> 00:17:12,850

of feeling good it's I think so there's

392

00:17:10,720 --> 00:17:15,850

a lot in it you know life is not just a

393

00:17:12,849 --> 00:17:18,250

haha there's a whole lot more to it and

394

00:17:15,849 --> 00:17:20,828

it's about our attitude towards how we

395

00:17:18,250 --> 00:17:22,179

view the world and ourselves Helen

396

00:17:20,828 --> 00:17:24,068

Grover I'll just run you through what

397

00:17:22,179 --> 00:17:26,439

they do at the tickle spur okay so yeah

398

00:17:24,068 --> 00:17:28,659

it would like it accurate ok right yeah

399

00:17:26,439 --> 00:17:30,340

now this from the time magazine report

400
00:17:28,660 --> 00:17:32,140
now much like any other day spa the

401
00:17:30,339 --> 00:17:34,869
treatment takes place in a darkened room

402
00:17:32,140 --> 00:17:37,509
with soothing music playing and a hint

403
00:17:34,869 --> 00:17:39,849
of incense now the client disrobes put

404
00:17:37,509 --> 00:17:41,589
on a pair of crinkly undies and lies

405
00:17:39,849 --> 00:17:43,689
face down on the table and then the

406
00:17:41,589 --> 00:17:46,329
tickling first would fingertips drawn

407
00:17:43,690 --> 00:17:48,519
along the body then a feather and a 30

408
00:17:46,329 --> 00:17:51,009
minute session costs 25 euros and a

409
00:17:48,519 --> 00:17:55,839
whole hour 45 euros now does that sound

410
00:17:51,009 --> 00:17:59,400
like a great tickling experience you

411
00:17:55,839 --> 00:18:01,058
know what that evoked is a grave sexual

412
00:17:59,400 --> 00:18:03,548
experience well

413
00:18:01,058 --> 00:18:06,700
yes I'm looking you wearing funny paper

414
00:18:03,548 --> 00:18:09,668
crinkling undies essential idea I could

415
00:18:06,700 --> 00:18:12,100
think of I meant just think about it to

416
00:18:09,669 --> 00:18:14,559
be lying in a darkened room with incense

417
00:18:12,099 --> 00:18:16,689
and your neurology is and music going

418
00:18:14,558 --> 00:18:18,940
and then slowly finger tickling I mean

419
00:18:16,690 --> 00:18:20,499
that in itself is very not even tickling

420
00:18:18,940 --> 00:18:22,629
it's just finger on it and then a

421
00:18:20,499 --> 00:18:24,579
feather and that's incredibly sensual

422
00:18:22,628 --> 00:18:26,138
the dude is like a cover for something

423
00:18:24,579 --> 00:18:29,528
else that might be going on inspiring is

424
00:18:26,138 --> 00:18:31,269
it I want to go that's good well yeah I

425
00:18:29,528 --> 00:18:32,589
mean it's because I look I you used to

426
00:18:31,269 --> 00:18:34,359
used to live live with my girlfriend

427
00:18:32,589 --> 00:18:36,069
she's to love getting a ticket used to

428

00:18:34,359 --> 00:18:37,628
help help relax her at not to go to

429
00:18:36,069 --> 00:18:39,158
sleep and that that was that was one of

430
00:18:37,628 --> 00:18:40,509
her things and i guess some people are

431
00:18:39,159 --> 00:18:42,999
more ticklish than others aren't think

432
00:18:40,509 --> 00:18:45,490
it's not just that you see now that you

433
00:18:42,999 --> 00:18:47,798
mentioned something very valuable if she

434
00:18:45,490 --> 00:18:49,450
loved it you're in a relationship you

435
00:18:47,798 --> 00:18:51,579
engaged in that that would have been

436
00:18:49,450 --> 00:18:53,528
magical you know that would have been a

437
00:18:51,579 --> 00:18:55,599
wonderful thing to happen but can you

438
00:18:53,528 --> 00:18:57,759
imagine if she hated being tickled and

439
00:18:55,599 --> 00:18:59,288
you came along and said i look i think

440
00:18:57,759 --> 00:19:01,778
i'll give you a good tickle to loosen up

441
00:18:59,288 --> 00:19:03,730
your day and she would have been would

442
00:19:01,778 --> 00:19:06,460

have hates sometimes because tickling

443

00:19:03,730 --> 00:19:09,038

can be painful that's the thing that's

444

00:19:06,460 --> 00:19:10,869

true you can reach that point yes and

445

00:19:09,038 --> 00:19:12,460

also it you know someone tickles you

446

00:19:10,868 --> 00:19:14,528

against your will and you're forced to

447

00:19:12,460 --> 00:19:17,470

do it they're making you do something

448

00:19:14,528 --> 00:19:19,929

you don't really want to do that's where

449

00:19:17,470 --> 00:19:22,360

i'm very concerned about that's what I'm

450

00:19:19,929 --> 00:19:24,210

saying I very much believe in validating

451

00:19:22,359 --> 00:19:26,498

and honoring another human being and

452

00:19:24,210 --> 00:19:29,319

therefore we have to be very careful

453

00:19:26,499 --> 00:19:31,089

what we do to their bodies but I mean if

454

00:19:29,319 --> 00:19:33,849

you're going to pay good money to go to

455

00:19:31,089 --> 00:19:35,648

a spanish tickling spa and get all these

456

00:19:33,849 --> 00:19:38,558

things sounds quite cheap how much is a

457
00:19:35,648 --> 00:19:40,058
euro in australian dollars so i don't

458
00:19:38,558 --> 00:19:41,440
know but you know be it's probably you

459
00:19:40,058 --> 00:19:44,319
could probably haggle a bit too I reckon

460
00:19:41,440 --> 00:19:46,119
oh I see I'd say it's another way for

461
00:19:44,319 --> 00:19:48,128
this part to make a bit of money I they

462
00:19:46,118 --> 00:19:50,408
found out that anyway well actually that

463
00:19:48,128 --> 00:19:51,609
they are two trained massage therapists

464
00:19:50,409 --> 00:19:53,320
that have come up with that they said

465
00:19:51,609 --> 00:19:59,019
there's no school for tickling in Spain

466
00:19:53,319 --> 00:20:02,378
but maybe they haven't looked enough is

467
00:19:59,019 --> 00:20:04,690
the funny concept I me know as i said if

468
00:20:02,378 --> 00:20:06,668
someone goes to that place plays mommy

469
00:20:04,690 --> 00:20:08,710
knows that this is what they're going to

470
00:20:06,669 --> 00:20:11,350
get and that's what they're doing well

471
00:20:08,710 --> 00:20:13,480
that's okay that's quite as long as

472
00:20:11,349 --> 00:20:15,099
nobody else gets the ideal you know

473
00:20:13,480 --> 00:20:16,778
somebody's pay money to go to a trickle

474
00:20:15,099 --> 00:20:19,298
spare I'm going to do it to you and the

475
00:20:16,778 --> 00:20:22,028
person doesn't want to I mean this is

476
00:20:19,298 --> 00:20:25,628
this is the thing but it doesn't the

477
00:20:22,028 --> 00:20:28,240
tickling is only a momentary fix like

478
00:20:25,628 --> 00:20:29,528
everything else and particularly must be

479
00:20:28,240 --> 00:20:32,349
consensual that's what you're saying

480
00:20:29,528 --> 00:20:35,319
absolutely that's the word consensual

481
00:20:32,349 --> 00:20:39,638
absolutely if it's not then it's it's

482
00:20:35,319 --> 00:20:41,558
it's definitely a no-no well but Helene

483
00:20:39,638 --> 00:20:43,058
Grover can we see a big future for

484
00:20:41,558 --> 00:20:49,690
tickle sparse throughout the world you

485

00:20:43,058 --> 00:20:52,028
reckon well i think it's it's it's no i

486
00:20:49,690 --> 00:20:55,570
think this is a place for it like

487
00:20:52,028 --> 00:20:57,669
everything else but i think to me it's

488
00:20:55,569 --> 00:21:01,000
more a bigger thing in the world where

489
00:20:57,669 --> 00:21:04,929
we need to be a bit more playful and

490
00:21:01,000 --> 00:21:07,628
enter into playful humorous outlooks and

491
00:21:04,929 --> 00:21:10,750
and having a laugh with people around us

492
00:21:07,628 --> 00:21:13,000
and finding the humor and engaging into

493
00:21:10,750 --> 00:21:15,490
them the motion main part if we can if

494
00:21:13,000 --> 00:21:17,829
we can tap into our humanities I think

495
00:21:15,490 --> 00:21:19,960
it will be much more productive towards

496
00:21:17,829 --> 00:21:22,418
laughing and feeling good this is a

497
00:21:19,960 --> 00:21:24,970
lovely idea for a business that I must

498
00:21:22,419 --> 00:21:26,980
admit but I don't know she's got love to

499
00:21:24,970 --> 00:21:30,358

I mean how long can someone get tickled

500

00:21:26,980 --> 00:21:33,639

for wait look its 45-year Oh for an hour

501

00:21:30,358 --> 00:21:35,618

that's longer than i can go okay she

502

00:21:33,638 --> 00:21:39,428

said go to the loo before they go in the

503

00:21:35,618 --> 00:21:41,558

head right no I'll just ask you one very

504

00:21:39,429 --> 00:21:42,940

loaded question to finish as as someone

505

00:21:41,558 --> 00:21:44,648

in charge of laughter strategies

506

00:21:42,940 --> 00:21:48,070

Australia what would you recommend as

507

00:21:44,648 --> 00:21:49,689

the funny movie to look at to laugh at

508

00:21:48,069 --> 00:21:51,368

if someone says I've got to see a funny

509

00:21:49,690 --> 00:21:52,720

movie what one would you recommend we

510

00:21:51,368 --> 00:21:54,759

were talking about that the other day

511

00:21:52,720 --> 00:21:56,230

about you laughs yourself in your you

512

00:21:54,759 --> 00:21:58,599

know you you wet your pants and you're

513

00:21:56,230 --> 00:22:01,329

sitting there completely rolling over my

514
00:21:58,599 --> 00:22:03,339
crudeness I'm trunk oh I know I know I

515
00:22:01,329 --> 00:22:06,009
know there's been a few i love british

516
00:22:03,339 --> 00:22:10,269
humor to neither the ultimate one of the

517
00:22:06,009 --> 00:22:12,759
funniest was death at a funeral have you

518
00:22:10,269 --> 00:22:14,048
seen that I I think I thought I thought

519
00:22:12,759 --> 00:22:15,759
you about to mention the early work of

520
00:22:14,048 --> 00:22:18,089
benny hill there for a moment but no no

521
00:22:15,759 --> 00:22:20,440
I don't like Benny Hill whatsoever and

522
00:22:18,089 --> 00:22:22,868
for weddings in a funeral I could watch

523
00:22:20,440 --> 00:22:24,519
that forever you know but death at a

524
00:22:22,868 --> 00:22:26,720
funeral there were scenes in there where

525
00:22:24,519 --> 00:22:29,240
I absolutely did with myself

526
00:22:26,720 --> 00:22:32,870
must admit but you know asking off the

527
00:22:29,240 --> 00:22:34,909
cup that there's a lot but some of this

528
00:22:32,869 --> 00:22:37,279
just crashed but this one was very funny

529
00:22:34,909 --> 00:22:39,409
and very clever and very situations then

530
00:22:37,279 --> 00:22:41,928
you know and there are moments though

531
00:22:39,409 --> 00:22:44,990
inside sometimes a really bad movie will

532
00:22:41,929 --> 00:22:48,019
fit me off too if it's really really bad

533
00:22:44,990 --> 00:22:50,329
and the acting is absolutely abysmal and

534
00:22:48,019 --> 00:22:53,538
then I'll just sit there and laugh what

535
00:22:50,329 --> 00:22:57,558
may I recommend a the 1980 disco classic

536
00:22:53,538 --> 00:22:58,849
the Apple oh it's so little known it's

537
00:22:57,558 --> 00:23:02,589
even less known in the Village People

538
00:22:58,849 --> 00:23:08,480
film can't stop the music I'm absolutely

539
00:23:02,589 --> 00:23:11,720
no-one 1986a on 1980 the Apple it was an

540
00:23:08,480 --> 00:23:14,779
a British Israeli co-production right

541
00:23:11,720 --> 00:23:17,538
the Apple it's a musical and every song

542

00:23:14,779 --> 00:23:19,759
sounds like another musical you've ever

543
00:23:17,538 --> 00:23:21,710
heard like it's an end and it just keeps

544
00:23:19,759 --> 00:23:24,679
em 1 bits even like a wham film clip

545
00:23:21,710 --> 00:23:26,900
it's it's very funny it's not ah I get

546
00:23:24,679 --> 00:23:28,730
that I'd love to get that the Apple and

547
00:23:26,900 --> 00:23:31,820
so it was all about the Faustian tile

548
00:23:28,730 --> 00:23:33,798
and all that kind oh yeah the Apple it's

549
00:23:31,819 --> 00:23:36,259
worth a look no one has seen it it's

550
00:23:33,798 --> 00:23:40,298
very funny very high production values

551
00:23:36,259 --> 00:23:40,298
and it's it's that bad it's funny

552
00:23:49,599 --> 00:23:58,099
this is an EVP I recorded last night how

553
00:23:54,259 --> 00:24:00,500
you doing I'm a ghost what's up you guys

554
00:23:58,099 --> 00:24:04,279
can't possibly ignore the type of it who

555
00:24:00,500 --> 00:24:05,750
are you we're doing my EVPs of the

556
00:24:04,279 --> 00:24:07,759

result of pareidolia I'm cross

557

00:24:05,750 --> 00:24:09,950

modulation combined with the listeners

558

00:24:07,759 --> 00:24:14,000

hopes and expectations why does this

559

00:24:09,950 --> 00:24:22,789

have to do with science think you just

560

00:24:14,000 --> 00:24:31,640

got skipped agree phone well skeptically

561

00:24:22,789 --> 00:24:34,428

palm com wear sunscreen in the next now

562

00:24:31,640 --> 00:24:39,860

it's time for dr. Rachel reports with

563

00:24:34,429 --> 00:24:42,710

dr. Rachel Dunlop hello listeners and

564

00:24:39,859 --> 00:24:44,839

welcome to dr. Reggie reports well this

565

00:24:42,710 --> 00:24:46,910

week I'm in Melbourne and I took the

566

00:24:44,839 --> 00:24:50,029

time to pop into the walter analyzer

567

00:24:46,910 --> 00:24:53,090

Hall Institute to talk to PhD student

568

00:24:50,029 --> 00:24:55,879

Lena hop Oh Lena has recently been named

569

00:24:53,089 --> 00:24:58,339

one of 16 Australian fresh scientists

570

00:24:55,880 --> 00:25:00,500

for her research identifying the genes

571
00:24:58,339 --> 00:25:03,319
that control the killing of tumor cells

572
00:25:00,500 --> 00:25:05,599
after chemotherapy treatment fresh

573
00:25:03,319 --> 00:25:08,149
science is an annual competition for

574
00:25:05,599 --> 00:25:10,069
early career researchers that raises

575
00:25:08,150 --> 00:25:12,769
their public profile and provide science

576
00:25:10,069 --> 00:25:14,419
communication and media training and you

577
00:25:12,769 --> 00:25:17,629
can find more information at fresh

578
00:25:14,420 --> 00:25:22,070
science org dot a you so here's Lena

579
00:25:17,630 --> 00:25:24,050
talking to us at the wii hi i'm here

580
00:25:22,069 --> 00:25:26,119
with lena ha phone i'm at the walter and

581
00:25:24,049 --> 00:25:28,669
eliza hall Institute in Melbourne hi

582
00:25:26,119 --> 00:25:30,799
Lena hi thanks for joining us say on the

583
00:25:28,670 --> 00:25:32,990
skeptical zone so you've just done some

584
00:25:30,799 --> 00:25:34,879
really fascinating research which was

585
00:25:32,990 --> 00:25:37,130
recently published in the journal blood

586
00:25:34,880 --> 00:25:39,170
and looking at cancers and specifically

587
00:25:37,130 --> 00:25:41,360
further genetics of cancers to

588
00:25:39,170 --> 00:25:43,519
understand why some types of cancers are

589
00:25:41,359 --> 00:25:45,859
resistant to chemotherapy or don't

590
00:25:43,519 --> 00:25:47,750
respond very well to chemotherapy can I

591
00:25:45,859 --> 00:25:49,490
just start off by asking you a little

592
00:25:47,750 --> 00:25:50,569
bit about the types of cancers that you

593
00:25:49,490 --> 00:25:53,179
look at because there's not just one

594
00:25:50,569 --> 00:25:54,710
type of cancer is there no there isn't

595
00:25:53,179 --> 00:25:58,070
there's many different types of cancers

596
00:25:54,710 --> 00:25:59,340
there are hematological malignancies is

597
00:25:58,069 --> 00:26:02,099
what we call them and then

598
00:25:59,339 --> 00:26:05,309
blood cancers there are also solid

599

00:26:02,099 --> 00:26:08,909
tumors such as you get things like

600
00:26:05,309 --> 00:26:11,159
breast cancer and ovarian cancer and I

601
00:26:08,910 --> 00:26:13,290
specifically focus on blood cancers and

602
00:26:11,160 --> 00:26:16,440
more specifically a type of blood cancer

603
00:26:13,289 --> 00:26:18,839
called lymphoma even within the lymphoma

604
00:26:16,440 --> 00:26:21,690
category we have various different types

605
00:26:18,839 --> 00:26:24,089
of lymphoma and I work on a type called

606
00:26:21,690 --> 00:26:26,340
burkitt's lymphoma so what is it about

607
00:26:24,089 --> 00:26:28,169
cancer I mean how would you describe it

608
00:26:26,339 --> 00:26:30,569
to a layperson it's kind of the cells

609
00:26:28,170 --> 00:26:32,250
that won't dial is how would you explain

610
00:26:30,569 --> 00:26:35,279
it so I think there are various

611
00:26:32,250 --> 00:26:37,470
different types of cancers and one type

612
00:26:35,279 --> 00:26:39,690
of cancer is cancer where we get

613
00:26:37,470 --> 00:26:42,750

uncontrolled proliferation or

614

00:26:39,690 --> 00:26:44,430

uncontrolled growth of cells there's

615

00:26:42,750 --> 00:26:46,759

another type in it it's quite similar

616

00:26:44,430 --> 00:26:49,049

time we get uncontrolled growth of cells

617

00:26:46,759 --> 00:26:51,599

causing cancer because they're not able

618

00:26:49,049 --> 00:26:54,419

to die so then we get accumulation of

619

00:26:51,599 --> 00:26:57,149

these these cells and that's what causes

620

00:26:54,420 --> 00:26:59,220

cancer so when it comes to cells dying

621

00:26:57,150 --> 00:27:01,890

there's kind of two types of ways that

622

00:26:59,220 --> 00:27:03,509

cells can die broadly speaking what it

623

00:27:01,890 --> 00:27:05,280

is called necrosis where cell sort of

624

00:27:03,509 --> 00:27:07,019

spontaneously die but what you're

625

00:27:05,279 --> 00:27:08,549

talking about is the programmed cell

626

00:27:07,019 --> 00:27:12,750

death which is also called apoptosis

627

00:27:08,549 --> 00:27:14,909

right yes sorry apoptosis is is very

628
00:27:12,750 --> 00:27:17,940
controlled as you say this there's no

629
00:27:14,910 --> 00:27:20,040
inflammation involved and it's something

630
00:27:17,940 --> 00:27:22,320
that's being programmed into each one of

631
00:27:20,039 --> 00:27:24,569
our cells and that's why we call it

632
00:27:22,319 --> 00:27:26,159
programmed cell death its intrinsic

633
00:27:24,569 --> 00:27:28,169
within each of our cells it's very

634
00:27:26,160 --> 00:27:30,750
important for elimination of damaged

635
00:27:28,170 --> 00:27:34,130
cells in your body and it's also very

636
00:27:30,750 --> 00:27:38,190
important for development so I'm

637
00:27:34,130 --> 00:27:40,080
focusing on a type of apoptosis which we

638
00:27:38,190 --> 00:27:42,750
call the bcl-2 regulated or

639
00:27:40,079 --> 00:27:46,169
mitochondrial apoptosis pathway so

640
00:27:42,750 --> 00:27:49,380
that's regulated very tightly by the

641
00:27:46,170 --> 00:27:52,500
interaction between some proteins and

642
00:27:49,380 --> 00:27:55,170
these proteins belong to a family of

643
00:27:52,500 --> 00:27:57,690
proteins called the bcl-2 protein family

644
00:27:55,170 --> 00:27:59,940
and basically within the bcl-2 protein

645
00:27:57,690 --> 00:28:02,610
family we have the pro survival so those

646
00:27:59,940 --> 00:28:06,600
proteins that promote cell survival and

647
00:28:02,609 --> 00:28:09,569
those that promotes cell death so the

648
00:28:06,599 --> 00:28:12,000
different the balance between these two

649
00:28:09,569 --> 00:28:13,139
different types of groups of proteins is

650
00:28:12,000 --> 00:28:16,859
important for

651
00:28:13,140 --> 00:28:20,040
termini cell death or cell survival many

652
00:28:16,859 --> 00:28:21,629
cancers many human cancers have been

653
00:28:20,039 --> 00:28:25,230
reported to have some sort of

654
00:28:21,630 --> 00:28:27,720
deregulation so so these proapoptotic or

655
00:28:25,230 --> 00:28:30,870
pro-survival proteins are functioning in

656

00:28:27,720 --> 00:28:33,660
a way that is not normal again we go

657
00:28:30,869 --> 00:28:37,129
accumulation or overgrowth of these

658
00:28:33,660 --> 00:28:40,050
cells which causes cancer so the way

659
00:28:37,130 --> 00:28:42,330
chemotherapy works is it that it damages

660
00:28:40,049 --> 00:28:44,519
the DNA of the cell and then that causes

661
00:28:42,329 --> 00:28:45,990
the cell to recognize that it's ill and

662
00:28:44,519 --> 00:28:48,750
it goes into this programmed cell death

663
00:28:45,990 --> 00:28:50,130
or apoptosis yes but there's a problem

664
00:28:48,750 --> 00:28:53,220
with that isn't it because it's not

665
00:28:50,130 --> 00:28:56,100
selective just for the cancer cells yes

666
00:28:53,220 --> 00:28:59,490
it's not um so when we hits too much

667
00:28:56,099 --> 00:29:03,119
tumor cells with chemotherapy it

668
00:28:59,490 --> 00:29:05,880
basically kills worth your normal cells

669
00:29:03,119 --> 00:29:09,419
and your cancerous cells so they they're

670
00:29:05,880 --> 00:29:12,300

actually designed to kill fast so

671

00:29:09,420 --> 00:29:14,279
rapidly replicating cells and not just

672

00:29:12,299 --> 00:29:16,980
your cancer cells so that includes

673

00:29:14,279 --> 00:29:19,049
things like hair cells the lining of

674

00:29:16,980 --> 00:29:20,759
your stomach and does that explain why

675

00:29:19,049 --> 00:29:23,730
you get horrible side effects in chemo

676

00:29:20,759 --> 00:29:25,890
such as hair loss and also nausea yeah

677

00:29:23,730 --> 00:29:27,690
okay so now that you've actually

678

00:29:25,890 --> 00:29:29,700
discovered that there are these

679

00:29:27,690 --> 00:29:32,120
particular proteins that might be the

680

00:29:29,700 --> 00:29:34,319
ones that are resisting the chemotherapy

681

00:29:32,119 --> 00:29:36,989
do you think that that might in the

682

00:29:34,319 --> 00:29:39,779
future mean you can selectively target

683

00:29:36,990 --> 00:29:42,240
these and therefore somehow not select

684

00:29:39,779 --> 00:29:43,740
those healthy cells so I guess what's

685
00:29:42,240 --> 00:29:45,450
really important about this work and

686
00:29:43,740 --> 00:29:48,509
what's what's quite exciting is um

687
00:29:45,450 --> 00:29:51,210
although doctors don't yet do it because

688
00:29:48,509 --> 00:29:52,710
it's it's a little bit pricey a little

689
00:29:51,210 --> 00:29:54,779
way down the track it might be possible

690
00:29:52,710 --> 00:29:57,180
when someone comes into the clinic and

691
00:29:54,779 --> 00:29:59,369
says and they're diagnosed with lymphoma

692
00:29:57,180 --> 00:30:01,799
then the doctors might be able to look

693
00:29:59,369 --> 00:30:03,869
at the specific genetic makeup within

694
00:30:01,799 --> 00:30:05,879
that individuals tumor which which which

695
00:30:03,869 --> 00:30:08,250
varies from individual to individual

696
00:30:05,880 --> 00:30:11,640
even though they're diagnosed with the

697
00:30:08,250 --> 00:30:13,019
same lymphoma and basically when they

698
00:30:11,640 --> 00:30:15,390
look at the genetic makeup and they

699
00:30:13,019 --> 00:30:17,129
realize one of these genes are missing

700
00:30:15,390 --> 00:30:19,170
one of these proteins are missing then

701
00:30:17,130 --> 00:30:21,180
they'll be a one or specific

702
00:30:19,170 --> 00:30:23,550
combinations of course of these genes

703
00:30:21,180 --> 00:30:26,250
then they'll be able to tell before they

704
00:30:23,549 --> 00:30:26,589
prescribe the chemotherapy whether these

705
00:30:26,250 --> 00:30:29,349
pay

706
00:30:26,589 --> 00:30:32,548
are going to react favorably to

707
00:30:29,349 --> 00:30:35,439
treatment or not and that means that

708
00:30:32,548 --> 00:30:37,298
basically if the doctor finds that this

709
00:30:35,440 --> 00:30:39,190
patient is likely not to respond

710
00:30:37,298 --> 00:30:42,429
favorably to treatment then he can

711
00:30:39,190 --> 00:30:44,970
perhaps suggest alternative therapies or

712
00:30:42,429 --> 00:30:47,590
not have to waste the patrons time in

713

00:30:44,970 --> 00:30:49,929
undergoing this this chemotherapy which

714
00:30:47,589 --> 00:30:53,649
causes hair loss and nausea and other

715
00:30:49,929 --> 00:30:56,288
side effects and yeah ultimately improve

716
00:30:53,650 --> 00:30:58,840
the quality of life of patients so you

717
00:30:56,288 --> 00:31:01,089
might actually be able to tell we you

718
00:30:58,839 --> 00:31:02,589
can probably tell now whether that Jim

719
00:31:01,089 --> 00:31:04,209
is going to respond to that therapy or

720
00:31:02,589 --> 00:31:06,459
not and therefore the benefits to the

721
00:31:04,210 --> 00:31:08,860
patients are potentially huge yes yes a

722
00:31:06,460 --> 00:31:10,929
clear right and and as you said before I

723
00:31:08,859 --> 00:31:12,729
mean understanding the differences

724
00:31:10,929 --> 00:31:15,210
between what's going on in cancer cells

725
00:31:12,730 --> 00:31:17,798
and what's going on in normal cells

726
00:31:15,210 --> 00:31:19,960
means that we'll be able to develop more

727
00:31:17,798 --> 00:31:23,470

targeted therapies which are specific

728

00:31:19,960 --> 00:31:25,630

for cancer cells without the collateral

729

00:31:23,470 --> 00:31:27,579

damage that we see to normal cells

730

00:31:25,630 --> 00:31:28,960

selena not only have you published this

731

00:31:27,579 --> 00:31:30,158

work in the highly prestigious journal

732

00:31:28,960 --> 00:31:33,159

blood but i believe you actually

733

00:31:30,159 --> 00:31:35,950

presented these results in a minute in a

734

00:31:33,159 --> 00:31:39,278

pub recently for fresh science how'd

735

00:31:35,950 --> 00:31:42,399

that go that was very stressful we had

736

00:31:39,278 --> 00:31:45,819

intensive media training beforehand to

737

00:31:42,398 --> 00:31:50,229

to know how to get your message across

738

00:31:45,819 --> 00:31:52,538

in the easiest possible terms in the

739

00:31:50,230 --> 00:31:55,599

shortest amount of time I think I've

740

00:31:52,538 --> 00:31:56,859

learned a lot okay so later thanks so

741

00:31:55,599 --> 00:31:59,230

much for taking some time out from

742
00:31:56,859 --> 00:32:02,648
furiously writing up your PhD today nice

743
00:31:59,230 --> 00:32:06,569
to have it to us and until next time

744
00:32:02,648 --> 00:32:06,569
this has been dr. Reggie reports

745
00:32:06,940 --> 00:32:12,529
dr. Rachel Dunlop is one of Australia's

746
00:32:09,769 --> 00:32:13,960
foremost media commentators in matters

747
00:32:12,529 --> 00:32:16,490
concerning so-called alternative

748
00:32:13,960 --> 00:32:20,299
medicine she has appeared on national

749
00:32:16,490 --> 00:32:22,579
radio and national television dr. H E is

750
00:32:20,299 --> 00:32:26,539
available for interviews and you can

751
00:32:22,579 --> 00:32:29,769
contact her at Rachel at skeptic zone

752
00:32:26,539 --> 00:32:29,769
dot TV

753
00:32:35,898 --> 00:32:41,278
hello on our needle on solo scoffs of

754
00:32:39,028 --> 00:32:43,409
deployment been to an at low slung out a

755
00:32:41,278 --> 00:32:47,940
skeptic zone for weeds and stop and

756

00:32:43,409 --> 00:32:50,940

Katie Schneider a meeting for Marcy

757

00:32:47,940 --> 00:33:04,230

karna we may be from skeptic song burn

758

00:32:50,940 --> 00:33:06,179

Stevie a lake people I know Rachel

759

00:33:04,230 --> 00:33:08,099

Dunlop is on the line who's a cell

760

00:33:06,179 --> 00:33:09,600

biologist communications officer at the

761

00:33:08,099 --> 00:33:12,599

heart Research Institute in Sydney

762

00:33:09,599 --> 00:33:14,608

rachel has written a toggle in cosmos

763

00:33:12,599 --> 00:33:16,439

magazines on the line hi Rachel good

764

00:33:14,608 --> 00:33:18,749

afternoon Lori how are you I'm well this

765

00:33:16,440 --> 00:33:22,288

doesn't start well if you're a fan of

766

00:33:18,749 --> 00:33:25,139

homeopathy pseudoscience makes me mad so

767

00:33:22,288 --> 00:33:27,569

it's not a good is not a good start well

768

00:33:25,138 --> 00:33:29,689

it makes me mad because homeopathy as

769

00:33:27,569 --> 00:33:31,918

you mentioned you talked about low

770

00:33:29,690 --> 00:33:33,690
quantities of a substance well in fact

771
00:33:31,919 --> 00:33:36,570
in most cases there's nothing in

772
00:33:33,690 --> 00:33:38,340
homeopathy it's diluted so much that

773
00:33:36,569 --> 00:33:40,499
it's kind of the equivalent of maybe

774
00:33:38,339 --> 00:33:42,238
putting a drop of vodka in a pool the

775
00:33:40,499 --> 00:33:44,788
size of the solar system maybe and then

776
00:33:42,239 --> 00:33:46,858
expecting to still get drunk okay pretty

777
00:33:44,788 --> 00:33:48,868
crazy but but homeopaths actually

778
00:33:46,858 --> 00:33:50,699
believe that the more dilute you make a

779
00:33:48,868 --> 00:33:52,528
substance they're more powerful and the

780
00:33:50,700 --> 00:33:55,528
stronger it becomes which defies logic

781
00:33:52,528 --> 00:33:59,038
it defies science it defies logic it

782
00:33:55,528 --> 00:34:02,579
defies common sense right how prevalent

783
00:33:59,038 --> 00:34:04,230
are homeopathy in Australian oh well

784
00:34:02,579 --> 00:34:05,970

there's quite a few professional

785

00:34:04,230 --> 00:34:08,519

associations in Australia such as the

786

00:34:05,970 --> 00:34:11,099

Australian homeopathic Association but

787

00:34:08,519 --> 00:34:13,409

homeopathy itself is everywhere and in

788

00:34:11,099 --> 00:34:15,899

fact one of the things that I've been

789

00:34:13,409 --> 00:34:17,608

sort of trying to campaign against for

790

00:34:15,898 --> 00:34:19,888

some time is that it's actually sold in

791

00:34:17,608 --> 00:34:22,108

pharmacies so you can walk into your

792

00:34:19,889 --> 00:34:24,899

local chemist shop and it's sitting on a

793

00:34:22,108 --> 00:34:28,318

shelf alongside science based medicines

794

00:34:24,898 --> 00:34:30,659

like aspirin or cough cough medicines

795

00:34:28,318 --> 00:34:32,838

stuff that have been through scientific

796

00:34:30,659 --> 00:34:35,250

testing and you know in the case of like

797

00:34:32,838 --> 00:34:37,739

aspirin and we know that it works and

798

00:34:35,250 --> 00:34:39,510

we've tested it clinically and it's been

799

00:34:37,739 --> 00:34:42,449

stringently tested repeatedly and it

800

00:34:39,510 --> 00:34:43,470

works now for a consumer if they see

801

00:34:42,449 --> 00:34:45,989

homie up

802

00:34:43,469 --> 00:34:47,878

sitting alongside perhaps some aspirin

803

00:34:45,989 --> 00:34:49,319

how are they to know that it doesn't

804

00:34:47,878 --> 00:34:50,960

actually work and that it doesn't do

805

00:34:49,320 --> 00:34:53,190

anything now there's a lot of good

806

00:34:50,960 --> 00:34:56,210

chemists out there but occasionally I

807

00:34:53,190 --> 00:34:59,730

strike a chemist who has dr. delusions

808

00:34:56,210 --> 00:35:01,858

okay you know I don't know if I've come

809

00:34:59,730 --> 00:35:03,929

across one of those well you know they

810

00:35:01,858 --> 00:35:06,929

they ask you about your symptoms and

811

00:35:03,929 --> 00:35:09,358

they ask you anything I might just give

812

00:35:06,929 --> 00:35:13,009

me the stuff that I've asked for we uh

813
00:35:09,358 --> 00:35:17,279
do do chemists recommend homie up

814
00:35:13,010 --> 00:35:18,990
homeopathic remedies well i mean i would

815
00:35:17,280 --> 00:35:20,430
have to also say Lori I mean they are

816
00:35:18,989 --> 00:35:22,079
supposed to ask you about your symptoms

817
00:35:20,429 --> 00:35:24,779
by the way because pharmacists are

818
00:35:22,079 --> 00:35:26,429
trained to understand how drugs work so

819
00:35:24,780 --> 00:35:28,099
actually if you've got a pharmacist

820
00:35:26,429 --> 00:35:31,500
asking you that they're doing their jobs

821
00:35:28,099 --> 00:35:33,059
but there are some that's annoying you

822
00:35:31,500 --> 00:35:36,090
know well it's it's for your own good

823
00:35:33,059 --> 00:35:38,070
Lori because you might be taking a

824
00:35:36,090 --> 00:35:39,720
different sort of several kinds of drugs

825
00:35:38,070 --> 00:35:41,519
and so the pharmacist is just trying to

826
00:35:39,719 --> 00:35:43,019
establish that you're not going to have

827

00:35:41,519 --> 00:35:44,429
a reaction if you take the one that

828
00:35:43,019 --> 00:35:46,559
they're giving you so there does my job

829
00:35:44,429 --> 00:35:48,960
now that's a good thing but know some of

830
00:35:46,559 --> 00:35:51,299
them I've never had one recommended to

831
00:35:48,960 --> 00:35:53,849
me but you will find in some pharmacies

832
00:35:51,300 --> 00:35:56,820
these days when you walk in they'll be

833
00:35:53,849 --> 00:35:58,650
and naturopaths on site in many

834
00:35:56,820 --> 00:36:01,559
pharmacies and they will recommend it to

835
00:35:58,650 --> 00:36:03,059
you and they don't tell you that there's

836
00:36:01,559 --> 00:36:04,559
nothing in it and they don't tell you

837
00:36:03,059 --> 00:36:06,838
that it shouldn't be used in place of

838
00:36:04,559 --> 00:36:09,570
conventional medicine I mean in fact I'm

839
00:36:06,838 --> 00:36:11,400
homeopathy itself is not harmful that's

840
00:36:09,570 --> 00:36:13,200
because as I said there's nothing in it

841
00:36:11,400 --> 00:36:16,230

so there's nothing in it it can't do you

842

00:36:13,199 --> 00:36:17,879

any harm but if you use it instead of

843

00:36:16,230 --> 00:36:20,608

getting proper conventional

844

00:36:17,880 --> 00:36:22,619

science-based medicine you can actually

845

00:36:20,608 --> 00:36:25,380

cause yourself harm and this has

846

00:36:22,619 --> 00:36:27,059

happened in Australia recently people

847

00:36:25,380 --> 00:36:28,800

may remember the story of glorious a

848

00:36:27,059 --> 00:36:31,500

more Gloria Thomas the nine month old

849

00:36:28,800 --> 00:36:34,080

toddler who tragically died from step to

850

00:36:31,500 --> 00:36:37,019

see Mia from untreated eczema now her

851

00:36:34,079 --> 00:36:39,000

parents are now in jail her dad for six

852

00:36:37,019 --> 00:36:40,940

years in her mum for four years because

853

00:36:39,000 --> 00:36:43,139

instead of treating her eczema with

854

00:36:40,940 --> 00:36:45,869

medicine that we know works they used

855

00:36:43,139 --> 00:36:47,549

homeopathy and she tragically died and

856
00:36:45,869 --> 00:36:49,680
also Penelope Dingle who was from

857
00:36:47,550 --> 00:36:52,859
Western Australia she dies at the age of

858
00:36:49,679 --> 00:36:54,899
45 from untreated bowel cancer because

859
00:36:52,858 --> 00:36:57,289
she had a homeopath um by the name of

860
00:36:54,900 --> 00:36:59,240
Francine's gray in telling her she could

861
00:36:57,289 --> 00:37:01,369
cure cancer with homeopathy and it's

862
00:36:59,239 --> 00:37:03,349
just consumers need to know that

863
00:37:01,369 --> 00:37:06,699
homeopathy does not work you call a

864
00:37:03,349 --> 00:37:09,909
gibberish I do call it gibberish it's

865
00:37:06,699 --> 00:37:14,119
you say because the homeopaths claim

866
00:37:09,909 --> 00:37:17,750
that if you dilute a substance in water

867
00:37:14,119 --> 00:37:22,369
it retains a memory of the original

868
00:37:17,750 --> 00:37:24,260
substance uh yeah this is something the

869
00:37:22,369 --> 00:37:26,960
homeopath have only recently invented by

870
00:37:24,260 --> 00:37:28,400
the way because 200 years ago science

871
00:37:26,960 --> 00:37:30,050
wasn't very advanced we didn't know a

872
00:37:28,400 --> 00:37:31,760
lot of the stuff we know these oh we

873
00:37:30,050 --> 00:37:33,950
thought the world was flat Rachel well

874
00:37:31,760 --> 00:37:35,420
we did and you know what we found out

875
00:37:33,949 --> 00:37:37,730
that it wasn't and then we changed our

876
00:37:35,420 --> 00:37:39,950
minds because we found evidence to the

877
00:37:37,730 --> 00:37:41,690
contrary and that's the same as when

878
00:37:39,949 --> 00:37:44,389
homeopathy was invented well we didn't

879
00:37:41,690 --> 00:37:47,090
know a lot about the chemistry of

880
00:37:44,389 --> 00:37:48,469
dilutions we now know that once you

881
00:37:47,090 --> 00:37:51,230
dilute something beyond a certain point

882
00:37:48,469 --> 00:37:53,899
there's no possibility that there's any

883
00:37:51,230 --> 00:37:55,460
molecules left so we know that it's

884

00:37:53,900 --> 00:37:56,539
actually for the mathematicians amongst

885
00:37:55,460 --> 00:38:00,440
your listeners it's called Avogadro's

886
00:37:56,539 --> 00:38:02,659
constant look it up on Wikipedia so when

887
00:38:00,440 --> 00:38:04,010
we figured that out the homeopath then

888
00:38:02,659 --> 00:38:05,569
went oh well what are we going to do now

889
00:38:04,010 --> 00:38:07,160
because science is telling us that

890
00:38:05,570 --> 00:38:09,559
there's no way that there can be any

891
00:38:07,159 --> 00:38:11,629
substance left and so they came up with

892
00:38:09,559 --> 00:38:14,900
the idea that the water would remember

893
00:38:11,630 --> 00:38:16,519
the substance it was originally in now I

894
00:38:14,900 --> 00:38:19,490
reckon this is a bit dodgy because

895
00:38:16,519 --> 00:38:21,349
doesn't that mean that all the water in

896
00:38:19,489 --> 00:38:23,659
the world would remember all the sewage

897
00:38:21,349 --> 00:38:26,269
it's been through all the dioxins and

898
00:38:23,659 --> 00:38:27,889

toxins and you know heavy metals and

899

00:38:26,269 --> 00:38:29,960

poisons and then we'd all be getting

900

00:38:27,889 --> 00:38:31,879

sick if we were drinking it I don't know

901

00:38:29,960 --> 00:38:34,880

it's essentially there's no fight to

902

00:38:31,880 --> 00:38:36,440

explain it Rachel I need to stop you

903

00:38:34,880 --> 00:38:38,119

there you're a plight you're applying

904

00:38:36,440 --> 00:38:40,070

logic where there isn't any at the

905

00:38:38,119 --> 00:38:43,309

moment I'm sorry about that and you've

906

00:38:40,070 --> 00:38:45,559

got to stop apply what I do it's like

907

00:38:43,309 --> 00:38:47,000

when you deal with governments dolly and

908

00:38:45,559 --> 00:38:48,980

their decisions you've you've got to

909

00:38:47,000 --> 00:38:54,139

understand you can't apply logic and

910

00:38:48,980 --> 00:38:55,990

common sense right but why what is in

911

00:38:54,139 --> 00:38:58,759

our psyche I look I'm assuming

912

00:38:55,989 --> 00:39:00,769

homeopathic medicine is a case of mind

913
00:38:58,760 --> 00:39:04,310
over matter and they say that the mind

914
00:39:00,769 --> 00:39:07,509
can cure anything even cancer if it if

915
00:39:04,309 --> 00:39:09,639
it believes it enough

916
00:39:07,510 --> 00:39:12,280
is that what this is about and do you as

917
00:39:09,639 --> 00:39:13,449
a scientist absolutely dispute well

918
00:39:12,280 --> 00:39:15,100
first of all I have to dispute

919
00:39:13,449 --> 00:39:17,469
homeopathic medicine that's an oxymoron

920
00:39:15,099 --> 00:39:19,690
it's not a medicine don't say that again

921
00:39:17,469 --> 00:39:23,230
Laurie right homeopathy it's not

922
00:39:19,690 --> 00:39:25,030
medicine well that there is a concept

923
00:39:23,230 --> 00:39:26,530
called the placebo effect which people

924
00:39:25,030 --> 00:39:28,660
may be familiar with and that's where

925
00:39:26,530 --> 00:39:30,640
even just the process of going to a

926
00:39:28,659 --> 00:39:35,529
doctor for example and seeing somebody

927
00:39:30,639 --> 00:39:38,769
in a doctor's dumb you know rooms can

928
00:39:35,530 --> 00:39:40,630
make people feel better so there's a lot

929
00:39:38,769 --> 00:39:41,860
of studies been done looking at tablets

930
00:39:40,630 --> 00:39:43,480
and it whether they have a placebo

931
00:39:41,860 --> 00:39:46,150
effect and we know a lot about it now we

932
00:39:43,480 --> 00:39:49,420
know that if we give people a small

933
00:39:46,150 --> 00:39:50,920
tablet that is a blue instead of red and

934
00:39:49,420 --> 00:39:52,780
if it's given to you by someone in a

935
00:39:50,920 --> 00:39:55,090
white coat rather than someone who's not

936
00:39:52,780 --> 00:39:57,100
in a white coat the placebo effect is

937
00:39:55,090 --> 00:40:00,460
more powerful so the human mind is

938
00:39:57,099 --> 00:40:02,199
incredibly powerful in that sense so yes

939
00:40:00,460 --> 00:40:05,860
there is some placebo effect with

940
00:40:02,199 --> 00:40:08,259
homeopathy but yes as I mentioned that

941

00:40:05,860 --> 00:40:10,090
will not cure you perceive effect can't

942
00:40:08,260 --> 00:40:12,580
kill you and also you mentioned that you

943
00:40:10,090 --> 00:40:15,120
can think your way out of cancer well

944
00:40:12,579 --> 00:40:18,519
there's no evidence to show that either

945
00:40:15,119 --> 00:40:21,279
unfortunately diseases like that you

946
00:40:18,519 --> 00:40:23,369
need to get conventional therapies but

947
00:40:21,280 --> 00:40:26,320
but also there's this concept known as

948
00:40:23,369 --> 00:40:28,239
where if you say you have a cold now

949
00:40:26,320 --> 00:40:30,340
most cold last between five to seven

950
00:40:28,239 --> 00:40:32,049
days and if in that period you might

951
00:40:30,340 --> 00:40:33,730
take some homeopathy or some sort of

952
00:40:32,050 --> 00:40:36,100
other placebo and then your cold gets

953
00:40:33,730 --> 00:40:37,750
better it's natural for your brain to

954
00:40:36,099 --> 00:40:39,009
say well it must have been the pill that

955
00:40:37,750 --> 00:40:41,980

I took it must have been the homeopathy

956

00:40:39,010 --> 00:40:45,190

but in fact your your cold was going to

957

00:40:41,980 --> 00:40:46,719

get better anyway so it's not it doesn't

958

00:40:45,190 --> 00:40:48,970

make people it doesn't mean you're a

959

00:40:46,719 --> 00:40:50,469

fool to believe that it doesn't anyone

960

00:40:48,969 --> 00:40:52,659

can be fooled into thinking that and

961

00:40:50,469 --> 00:40:53,739

it's a very powerful effect so there is

962

00:40:52,659 --> 00:40:55,659

some of that involved with homeopathy

963

00:40:53,739 --> 00:40:57,099

governments fund a little bit of

964

00:40:55,659 --> 00:40:59,440

homeopathy don't they to the tune of

965

00:40:57,099 --> 00:41:02,349

about three billion dollars yes well

966

00:40:59,440 --> 00:41:04,329

they don't directly fund it but they

967

00:41:02,349 --> 00:41:06,610

they put back about three billion

968

00:41:04,329 --> 00:41:09,250

dollars into private health fund rebates

969

00:41:06,610 --> 00:41:12,430

every year but if your health fund for

970
00:41:09,250 --> 00:41:14,949
example or your doctor prescribes you

971
00:41:12,429 --> 00:41:16,690
homeopathy and then you go and claim

972
00:41:14,949 --> 00:41:19,419
from the government for your health fund

973
00:41:16,690 --> 00:41:20,950
rebate then indirectly the taxpayers are

974
00:41:19,420 --> 00:41:22,539
funding it

975
00:41:20,949 --> 00:41:24,399
so that means we are paying for it as

976
00:41:22,539 --> 00:41:27,099
taxpayers when using this needs to stop

977
00:41:24,400 --> 00:41:29,079
I absolutely think it needs to stop and

978
00:41:27,099 --> 00:41:30,490
I'm not the only one and in fact the

979
00:41:29,079 --> 00:41:32,410
National Health and Medical Research

980
00:41:30,489 --> 00:41:34,118
Council which is kind of the the

981
00:41:32,409 --> 00:41:36,519
government body in Australia that

982
00:41:34,119 --> 00:41:39,579
advises us on drugs and what sort of

983
00:41:36,519 --> 00:41:41,259
drugs we should be taking they have just

984
00:41:39,579 --> 00:41:43,720
published a draft statement on

985
00:41:41,260 --> 00:41:46,839
homeopathy where they call it unethical

986
00:41:43,719 --> 00:41:49,358
and an efficacious and uneducated simply

987
00:41:46,838 --> 00:41:52,119
means it doesn't work so they based

988
00:41:49,358 --> 00:41:55,569
their statement on an extensive study

989
00:41:52,119 --> 00:41:57,940
that was done in the UK in 2010 now that

990
00:41:55,570 --> 00:41:59,588
was conducted by a government body and

991
00:41:57,940 --> 00:42:01,838
what they do in the UK is when their

992
00:41:59,588 --> 00:42:04,358
public health fund when their public

993
00:42:01,838 --> 00:42:07,119
money is funding some sort of Health you

994
00:42:04,358 --> 00:42:09,159
know whether it be funding hospital

995
00:42:07,119 --> 00:42:11,769
visits or something they do it what they

996
00:42:09,159 --> 00:42:13,480
call an evidence check and they go and

997
00:42:11,769 --> 00:42:14,829
they look at all the evidence for the

998

00:42:13,480 --> 00:42:16,990
thing that they're funding to see if

999
00:42:14,829 --> 00:42:19,510
there's still good reason for them to be

1000
00:42:16,989 --> 00:42:21,189
funding it and now they did this in 2010

1001
00:42:19,510 --> 00:42:23,230
and they looked at homeopathy and they

1002
00:42:21,190 --> 00:42:25,929
took submissions from homeopaths from

1003
00:42:23,230 --> 00:42:29,619
doctors from scientists and after they

1004
00:42:25,929 --> 00:42:31,118
produced a 273 page report with all the

1005
00:42:29,619 --> 00:42:32,619
evidence that they show that they looked

1006
00:42:31,119 --> 00:42:35,170
at they could find no evidence that

1007
00:42:32,619 --> 00:42:37,809
homeopathy worked and so in fact they

1008
00:42:35,170 --> 00:42:39,519
were funding homeopathy to the tune of

1009
00:42:37,809 --> 00:42:41,108
four million pounds and so they

1010
00:42:39,519 --> 00:42:42,639
recommended that the government no

1011
00:42:41,108 --> 00:42:44,318
longer fund it and so that's why the

1012
00:42:42,639 --> 00:42:49,210

australian government is now considering

1013

00:42:44,318 --> 00:42:52,420

doing the same thing and i should the

1014

00:42:49,210 --> 00:42:54,670

chi the compromise here would be if you

1015

00:42:52,420 --> 00:42:56,440

want to try homeopathy all right but

1016

00:42:54,670 --> 00:42:58,750

don't try it at the expense of

1017

00:42:56,440 --> 00:43:00,579

conventional medicine that's the message

1018

00:42:58,750 --> 00:43:03,429

it's very important well know that

1019

00:43:00,579 --> 00:43:06,068

homeopathy is not medicine it doesn't

1020

00:43:03,429 --> 00:43:08,529

work in most cases there's nothing in it

1021

00:43:06,068 --> 00:43:10,719

and so if people want to use it that's

1022

00:43:08,530 --> 00:43:12,490

no problem it's fine each still you know

1023

00:43:10,719 --> 00:43:14,139

even if the government in Australia does

1024

00:43:12,489 --> 00:43:16,118

bring through this official statement

1025

00:43:14,139 --> 00:43:17,949

saying that it's unethical and shouldn't

1026

00:43:16,119 --> 00:43:19,210

be used people will still be able to buy

1027
00:43:17,949 --> 00:43:20,828
it it won't be banned in australia

1028
00:43:19,210 --> 00:43:23,740
you'll probably still be able to get it

1029
00:43:20,829 --> 00:43:25,450
at your chemist but just make sure that

1030
00:43:23,739 --> 00:43:28,000
you continue to take your other

1031
00:43:25,449 --> 00:43:33,578
medicines that work rachel Dunlop is

1032
00:43:28,000 --> 00:43:34,570
crazy-mad homeopathy and I like I want

1033
00:43:33,579 --> 00:43:36,910
you to know that

1034
00:43:34,570 --> 00:43:38,620
rachel is also as well as a cell

1035
00:43:36,909 --> 00:43:40,239
biologist communications officer the

1036
00:43:38,619 --> 00:43:42,190
heart research institute vice president

1037
00:43:40,239 --> 00:43:44,079
the Australian skeptics Association who

1038
00:43:42,190 --> 00:43:45,940
I love their truck loads of fun but

1039
00:43:44,079 --> 00:43:48,429
great to talk to you Rachel and some

1040
00:43:45,940 --> 00:43:50,260
sober warnings about how you deal with

1041
00:43:48,429 --> 00:43:53,289
your health good to talk to you thanks

1042
00:43:50,260 --> 00:43:55,810
very much Larry Rachel Dunlop homie off

1043
00:43:53,289 --> 00:43:59,159
of him how do they is there any way be

1044
00:43:55,809 --> 00:43:59,159
we're careful

1045
00:44:19,610 --> 00:44:24,360
thank you for listening to the skeptic

1046
00:44:22,110 --> 00:44:26,340
zone I even enjoyed that episode today

1047
00:44:24,360 --> 00:44:28,410
myself what a laugh wait a minute wait a

1048
00:44:26,340 --> 00:44:32,030
minute where is it where's the laughter

1049
00:44:28,409 --> 00:44:35,429
come back come back press thank you I

1050
00:44:32,030 --> 00:44:39,030
thank you may not beg you doctor AG for

1051
00:44:35,429 --> 00:44:40,379
today's episode not sure what's coming

1052
00:44:39,030 --> 00:44:42,510
up next week it's going to be a bit of a

1053
00:44:40,380 --> 00:44:44,340
mixed bag because I have to put together

1054
00:44:42,510 --> 00:44:47,550
some interesting items and bits and

1055

00:44:44,340 --> 00:44:50,850
pieces to play to put out there just

1056
00:44:47,550 --> 00:44:53,190
before i jet out to Las Vegas to spend a

1057
00:44:50,849 --> 00:44:55,829
couple of days at tam nine if you're

1058
00:44:53,190 --> 00:44:58,139
going to tam nine can't wait to see you

1059
00:44:55,829 --> 00:45:00,690
there but you'll have to be quick to see

1060
00:44:58,139 --> 00:45:06,230
me because i'll be there and gone in two

1061
00:45:00,690 --> 00:45:10,400
days oh well oh well sleeping pills and

1062
00:45:06,230 --> 00:45:13,530
comfortable airline seats are my friends

1063
00:45:10,400 --> 00:45:15,930
anyway until then this is Richard

1064
00:45:13,530 --> 00:45:22,140
Saunders signing off from Sydney

1065
00:45:15,929 --> 00:45:26,819
Australia you've been listening to the

1066
00:45:22,139 --> 00:45:30,659
skeptic zone visit our website at www

1067
00:45:26,820 --> 00:45:34,370
skeptics on TV the comments contacts and

1068
00:45:30,659 --> 00:45:34,369
extra video reports