

1
00:00:05,960 --> 00:00:12,379
welcome to the skeptic zone the podcast

2
00:00:09,109 --> 00:00:22,809
from Australia for science and reason

3
00:00:12,380 --> 00:00:25,130
[Music]

4
00:00:22,809 --> 00:00:29,000
hello welcome to the skeptic zone

5
00:00:25,129 --> 00:00:32,320
episode number 434 for the twelfth of

6
00:00:29,000 --> 00:00:34,909
february2014 from Sydney Australia

7
00:00:32,320 --> 00:00:38,439
what's left of Sydney Australia after

8
00:00:34,909 --> 00:00:41,719
the recent heat waves yesterday was

9
00:00:38,439 --> 00:00:44,119
ridiculous for many reasons but

10
00:00:41,719 --> 00:00:46,100
particularly for the heat and the day

11
00:00:44,119 --> 00:00:50,829
before and the day before that and today

12
00:00:46,100 --> 00:00:52,910
I think is going to be very warm indeed

13
00:00:50,829 --> 00:00:54,909
Sydney Australia is a good place to

14
00:00:52,909 --> 00:00:58,759
avoid at this time of the year I think

15
00:00:54,909 --> 00:01:03,649
yes record heat across our state our

16
00:00:58,759 --> 00:01:07,849
parts of Sydney have been nudging 47

17
00:01:03,649 --> 00:01:10,219
degrees I seem to have heard it's all

18
00:01:07,849 --> 00:01:12,709
very silly maybe we can all cool down by

19
00:01:10,219 --> 00:01:14,480
listening to the skeptics on coming up

20
00:01:12,709 --> 00:01:19,759
on this week's show it's the diet

21
00:01:14,480 --> 00:01:22,460
skeptic mandy lee noble our our newest

22
00:01:19,760 --> 00:01:27,680
reporter this week mandy lee is going to

23
00:01:22,459 --> 00:01:30,319
be looking at a2 milk which char you've

24
00:01:27,680 --> 00:01:34,100
probably seen around which is sold as a

25
00:01:30,319 --> 00:01:37,429
premium milk what is a2 milk is it

26
00:01:34,099 --> 00:01:41,149
better than a1 milk 1 if there's an a3

27
00:01:37,430 --> 00:01:43,330
milk find out with mandy lee noble the

28
00:01:41,150 --> 00:01:46,340
diet skeptic at the top of the show

29

00:01:43,329 --> 00:01:48,609
following that it's brouhaha from the

30
00:01:46,340 --> 00:01:51,560
cafe of Australia science channel

31
00:01:48,609 --> 00:01:53,989
Australia science TV oh and a big shout

32
00:01:51,560 --> 00:01:55,850
out to my friend dr. Paul Willis who is

33
00:01:53,989 --> 00:01:58,699
the director of the Royal Institution of

34
00:01:55,849 --> 00:02:02,509
Australia dr. Paul Willis once again

35
00:01:58,700 --> 00:02:05,390
once again and I wish I was with him at

36
00:02:02,510 --> 00:02:10,368
the moment is making his way to the

37
00:02:05,390 --> 00:02:13,669
Antarctic for a scientific exploration

38
00:02:10,368 --> 00:02:18,590
he has been going down there for quite a

39
00:02:13,669 --> 00:02:21,199
few years now and I wish I could be his

40
00:02:18,590 --> 00:02:24,080
sidekick maybe I could do some video

41
00:02:21,199 --> 00:02:26,689
production Paul what do you reckon he is

42
00:02:24,080 --> 00:02:28,730
going to be swatting around with the

43
00:02:26,689 --> 00:02:32,180

Penguins so to speak sailing past

44

00:02:28,729 --> 00:02:34,519

icebergs looking at lots of snow and I

45

00:02:32,180 --> 00:02:36,290

think most of Sydney probably most

46

00:02:34,520 --> 00:02:37,939

this state of New South Wales and

47

00:02:36,289 --> 00:02:39,560

Queensland and everyone else would love

48

00:02:37,939 --> 00:02:43,400

to be with Paul Willis at the moment

49

00:02:39,560 --> 00:02:46,400

enjoying the exceptionally cool and

50

00:02:43,400 --> 00:02:49,189

crisp weather down of the South Pole yes

51

00:02:46,400 --> 00:02:51,950

but I digress yes brouhaha from

52

00:02:49,189 --> 00:02:55,430

Australia science TV and this week this

53

00:02:51,949 --> 00:02:58,609

week Ben Lewis looks at restrictions put

54

00:02:55,430 --> 00:03:00,890

on scientists in the US and how they

55

00:02:58,610 --> 00:03:03,560

getting around it and also honey birds

56

00:03:00,889 --> 00:03:06,199

from Mozambique and he puts from

57

00:03:03,560 --> 00:03:07,909

Mozambique 'it's brouhaha this week

58
00:03:06,199 --> 00:03:10,159
coming up a little bit later on in the

59
00:03:07,909 --> 00:03:11,810
show then we have some news from the

60
00:03:10,159 --> 00:03:14,750
Australian skeptics written by Tim

61
00:03:11,810 --> 00:03:16,939
mendham and we often bring your

62
00:03:14,750 --> 00:03:20,900
attention to articles and information

63
00:03:16,939 --> 00:03:22,939
petering at skeptics com au the website

64
00:03:20,900 --> 00:03:24,800
of Australian skeptics and of course I

65
00:03:22,939 --> 00:03:27,289
am a member of the the committee of

66
00:03:24,800 --> 00:03:28,910
Australian skeptics hello Australian

67
00:03:27,289 --> 00:03:30,859
skeptics this week we're going to find

68
00:03:28,909 --> 00:03:33,169
out why chiropractic group here in

69
00:03:30,860 --> 00:03:37,220
Australia has been distancing itself

70
00:03:33,169 --> 00:03:39,229
from the anti-vaccination crowd and also

71
00:03:37,219 --> 00:03:42,979
why research is a warning of dire

72
00:03:39,229 --> 00:03:46,340
effects of herbal remedies to very

73
00:03:42,979 --> 00:03:49,729
interesting stories a bit later on and

74
00:03:46,340 --> 00:03:52,099
to round off the show ghosts we join the

75
00:03:49,729 --> 00:03:54,379
stranger things down under facebook

76
00:03:52,099 --> 00:03:58,189
group a very new facebook group based in

77
00:03:54,379 --> 00:04:02,090
sydney on their first expedition outing

78
00:03:58,189 --> 00:04:05,900
to other look for ghosts in the historic

79
00:04:02,090 --> 00:04:09,979
rocks area of sydney do we bump into any

80
00:04:05,900 --> 00:04:12,530
ghost did any ghosts bump into us find

81
00:04:09,979 --> 00:04:14,659
out at the end of the show now listeners

82
00:04:12,530 --> 00:04:16,879
will remember i think it was last week

83
00:04:14,659 --> 00:04:18,889
or possibly the week before i was

84
00:04:16,879 --> 00:04:22,339
wondering what you would call a group of

85
00:04:18,889 --> 00:04:24,589
quacks mm-hmm the collective noun for a

86

00:04:22,339 --> 00:04:26,299
group of quacks well people have been

87
00:04:24,589 --> 00:04:28,729
writing in with their suggestions and

88
00:04:26,300 --> 00:04:32,379
i'll give a shout out to sure Luis all

89
00:04:28,730 --> 00:04:37,490
the way over there in Colorado says an

90
00:04:32,379 --> 00:04:39,949
echo of quacks an echo of quacks that's

91
00:04:37,490 --> 00:04:41,540
really good i love that one and some

92
00:04:39,949 --> 00:04:44,240
other people have thought of that as

93
00:04:41,540 --> 00:04:46,430
well i'm not surprised it's it's very

94
00:04:44,240 --> 00:04:47,810
clever and it's very apt I think but

95
00:04:46,430 --> 00:04:50,030
sure says

96
00:04:47,810 --> 00:04:53,259
first since they can't have gotten their

97
00:04:50,029 --> 00:04:58,129
claims from rigorous scientific inquiry

98
00:04:53,259 --> 00:05:00,439
most quackery is just the echo of folk

99
00:04:58,129 --> 00:05:03,139
wisdom magical thinking and other

100
00:05:00,439 --> 00:05:05,600

regurgitation second there is a broadly

101

00:05:03,139 --> 00:05:10,189

held but not thoroughly debunked myth

102

00:05:05,600 --> 00:05:12,400

that a duck's quack doesn't echo thank

103

00:05:10,189 --> 00:05:15,160

you sure and thank you to everybody else

104

00:05:12,399 --> 00:05:18,349

writing in with your suggestions

105

00:05:15,160 --> 00:05:20,510

colorado it's been many years since i've

106

00:05:18,350 --> 00:05:22,729

been to colorado i went to hiking in the

107

00:05:20,509 --> 00:05:26,560

Rockies with my good friend dr. Phil

108

00:05:22,728 --> 00:05:28,728

Plait the bad astronomer very memorable

109

00:05:26,560 --> 00:05:31,790

it's interesting being up at that

110

00:05:28,728 --> 00:05:33,529

altitude I didn't have many problems

111

00:05:31,790 --> 00:05:35,780

with the altitude I must say I was

112

00:05:33,529 --> 00:05:38,899

hiking way up in the Rockies and I think

113

00:05:35,779 --> 00:05:41,359

I did okay looking forward one day to

114

00:05:38,899 --> 00:05:43,099

going back well that's enough for me at

115
00:05:41,360 --> 00:05:47,180
the moment it's time for me to run

116
00:05:43,100 --> 00:05:51,770
downstairs open up the freezer retrieve

117
00:05:47,180 --> 00:05:54,410
the balloon full of ice now those of you

118
00:05:51,769 --> 00:05:56,740
who are familiar with the internet

119
00:05:54,410 --> 00:05:59,360
mm-hmm might have seen a video

120
00:05:56,740 --> 00:06:02,120
circulating lately where somebody fills

121
00:05:59,360 --> 00:06:06,560
up a balloon the water puts that in the

122
00:06:02,120 --> 00:06:09,680
freezer makes a giant sphere of ice puts

123
00:06:06,560 --> 00:06:13,970
the ice in a bowl and the cats come and

124
00:06:09,680 --> 00:06:17,780
have a big cold water supply and a big

125
00:06:13,970 --> 00:06:19,639
cold Isis fear to lick well I did that

126
00:06:17,779 --> 00:06:21,319
last night I filled up a balloon well

127
00:06:19,639 --> 00:06:23,600
about halfway full of water put it in

128
00:06:21,319 --> 00:06:27,259
the freezer and this morning there is a

129
00:06:23,600 --> 00:06:29,300
solid I think it's solid sphere of ice

130
00:06:27,259 --> 00:06:31,159
so I'm going to run downstairs take that

131
00:06:29,300 --> 00:06:33,800
out of the freezer put it into a large

132
00:06:31,160 --> 00:06:36,680
bowl and let the cats cool down with

133
00:06:33,800 --> 00:06:39,720
their new toy while I'm doing that I

134
00:06:36,680 --> 00:06:53,139
hope you enjoy the skeptic zone

135
00:06:39,720 --> 00:06:53,139
[Music]

136
00:06:55,610 --> 00:07:01,069
that looks good enough to eat or does it

137
00:07:02,060 --> 00:07:07,639
here's the diet skeptic mandy lee Noble

138
00:07:09,860 --> 00:07:17,520
hello skeptics and Lissa's mandy lee

139
00:07:13,620 --> 00:07:24,660
noble here dietitian and skeptic

140
00:07:17,519 --> 00:07:27,629
reporting from brisbane this week on the

141
00:07:24,660 --> 00:07:31,980
diet skeptic report i will be discussing

142
00:07:27,629 --> 00:07:34,439
a2 milk is there any evidence to support

143

00:07:31,980 --> 00:07:37,830
the claim that a to milk drinkers can

144
00:07:34,439 --> 00:07:40,230
feel the difference or is the a2 milk

145
00:07:37,829 --> 00:07:44,519
company just using science to get

146
00:07:40,230 --> 00:07:46,680
consumers to believe and better over the

147
00:07:44,519 --> 00:07:48,719
last two decades the range of dairy

148
00:07:46,680 --> 00:07:53,699
products available to Australian

149
00:07:48,720 --> 00:07:56,940
consumers has grown enormously in 2003

150
00:07:53,699 --> 00:07:59,879
a2 milk joined the fray and despite a

151
00:07:56,939 --> 00:08:02,668
rocky start a to milk now represents

152
00:07:59,879 --> 00:08:05,850
nine percent of the Australian fresh

153
00:08:02,668 --> 00:08:08,189
milk market more recently the a2 milk

154
00:08:05,850 --> 00:08:10,979
company launched its range of infant

155
00:08:08,189 --> 00:08:13,529
formulas in Australia New Zealand and

156
00:08:10,978 --> 00:08:15,990
China which has driven exceptional

157
00:08:13,529 --> 00:08:21,449

growth in a2 milk company's product

158

00:08:15,990 --> 00:08:24,600

sales so what exactly is a2 milk while

159

00:08:21,449 --> 00:08:28,050

cows like humans have individual genetic

160

00:08:24,600 --> 00:08:31,620

differences one example is the better

161

00:08:28,050 --> 00:08:34,370

casein protein found in milk is coded by

162

00:08:31,620 --> 00:08:37,288

gene that has several slight variations

163

00:08:34,370 --> 00:08:41,940

the two most common variations are

164

00:08:37,288 --> 00:08:44,639

called a1 and a2 in Australia regular

165

00:08:41,940 --> 00:08:49,110

milk contains roughly half a one bitter

166

00:08:44,639 --> 00:08:51,750

casein and half a two BD casein a2 milk

167

00:08:49,110 --> 00:08:53,550

is better described as a 2 only milk as

168

00:08:51,750 --> 00:08:55,769

it comes from cows that

169

00:08:53,549 --> 00:08:58,528

been selected to only have the a2

170

00:08:55,769 --> 00:09:00,060

variant of the beater casein gene and

171

00:08:58,528 --> 00:09:03,320

therefore produce milk that only

172
00:09:00,059 --> 00:09:06,268
contains there a two BD casein protein

173
00:09:03,320 --> 00:09:09,330
the difference between the a one and a

174
00:09:06,269 --> 00:09:12,778
two BD casein protein is just a single

175
00:09:09,330 --> 00:09:15,329
amino acid the a2 variant is the

176
00:09:12,778 --> 00:09:18,929
original form of the team is estimated

177
00:09:15,328 --> 00:09:21,419
the a1 variant first curd around 5,000

178
00:09:18,929 --> 00:09:23,819
years ago there's no difference in the

179
00:09:21,419 --> 00:09:26,578
taste or nutritional quality of regular

180
00:09:23,820 --> 00:09:29,490
milk compared to a2 milk except that a

181
00:09:26,578 --> 00:09:31,708
one protein may be better for making

182
00:09:29,490 --> 00:09:34,169
hard cheeses this may explain why the a

183
00:09:31,708 --> 00:09:39,449
one-gene became prevalent in European

184
00:09:34,169 --> 00:09:42,778
hands so if 82 only milk is the same

185
00:09:39,450 --> 00:09:45,360
nutritionally how could it be better the

186
00:09:42,778 --> 00:09:47,820
proponents of a2 milk do not claim that

187
00:09:45,360 --> 00:09:51,778
a to only milk provides any additional

188
00:09:47,820 --> 00:09:54,300
health benefits rather the a1 b2 casing

189
00:09:51,778 --> 00:09:57,000
found in regular milk could be a factor

190
00:09:54,299 --> 00:10:01,278
in health conditions such as type 1

191
00:09:57,000 --> 00:10:04,649
diabetes cardiovascular disease autism

192
00:10:01,278 --> 00:10:09,000
schizophrenia and gastrointestinal

193
00:10:04,649 --> 00:10:11,639
conditions digestion of the a1 b2 casein

194
00:10:09,000 --> 00:10:16,708
may more readily produce be turquesa

195
00:10:11,639 --> 00:10:19,169
Morphin 7 or b c m7 for short bc m7 and

196
00:10:16,708 --> 00:10:22,069
other better case of morph ins have been

197
00:10:19,169 --> 00:10:25,379
shown to have opioid like activity other

198
00:10:22,070 --> 00:10:27,510
opiates such as codeine slow down the

199
00:10:25,379 --> 00:10:32,519
passage of food in the gut and may cause

200

00:10:27,509 --> 00:10:37,439
constipation nausea and bloating so the

201
00:10:32,519 --> 00:10:40,740
a1 a2 hypothesis proposes that the BCM 7

202
00:10:37,440 --> 00:10:43,380
is biologically active in the human gut

203
00:10:40,740 --> 00:10:46,829
and drinking regular milk provides

204
00:10:43,379 --> 00:10:49,230
enough bc m7 to slow down the passage of

205
00:10:46,828 --> 00:10:53,129
food through the gut it also proposes

206
00:10:49,230 --> 00:10:57,360
that b c m7 could pass through the gut

207
00:10:53,129 --> 00:11:00,360
of an infant or a leaky gut to bind to

208
00:10:57,360 --> 00:11:02,759
opioid receptors in the brain does the

209
00:11:00,360 --> 00:11:06,600
research show that b c m7 is harmful to

210
00:11:02,759 --> 00:11:07,319
humans studies have detected b c m7 from

211
00:11:06,600 --> 00:11:09,600
cows meal

212
00:11:07,320 --> 00:11:12,180
can the gut of adults the urine of

213
00:11:09,600 --> 00:11:17,159
children and the plasma of formula-fed

214
00:11:12,179 --> 00:11:19,679

infants similarly human BCM 7 has been

215

00:11:17,159 --> 00:11:22,589

found in the plasma of breastfed infants

216

00:11:19,679 --> 00:11:26,629

as breast milk also contains a similar

217

00:11:22,590 --> 00:11:29,639

BCM seven peptide however there is

218

00:11:26,629 --> 00:11:34,110

insufficient evidence to show that B cm7

219

00:11:29,639 --> 00:11:36,029

affects human health ok so is there any

220

00:11:34,110 --> 00:11:38,909

evidence of drinking regular milk

221

00:11:36,029 --> 00:11:42,449

containing the a1 protein maker of

222

00:11:38,909 --> 00:11:45,179

course time some population studies have

223

00:11:42,450 --> 00:11:47,970

shown an association between a one BD

224

00:11:45,179 --> 00:11:51,569

casing and the rates of type 1 diabetes

225

00:11:47,970 --> 00:11:53,430

and cardiovascular disease however these

226

00:11:51,570 --> 00:11:55,170

studies have been criticized for the

227

00:11:53,429 --> 00:11:57,989

selection of countries included in the

228

00:11:55,169 --> 00:12:00,419

data set and excluding cheese and yogurt

229
00:11:57,990 --> 00:12:02,970
especially for France which shows a high

230
00:12:00,419 --> 00:12:05,579
intake of cheese and relatively low

231
00:12:02,970 --> 00:12:08,460
rates of cardiovascular disease while

232
00:12:05,580 --> 00:12:10,889
rates of type 1 diabetes may also be

233
00:12:08,460 --> 00:12:13,410
explained by rates of breastfeeding or

234
00:12:10,889 --> 00:12:18,500
vitamin D levels in countries that

235
00:12:13,409 --> 00:12:21,899
receive less sunlight so why not just

236
00:12:18,500 --> 00:12:23,360
conduct a randomized control trial to

237
00:12:21,899 --> 00:12:26,759
find out whether there is an effect

238
00:12:23,360 --> 00:12:29,759
given that regular milk and a2 milk look

239
00:12:26,759 --> 00:12:32,669
smell and taste the same this would seem

240
00:12:29,759 --> 00:12:34,919
the obvious solution however to date

241
00:12:32,669 --> 00:12:38,509
there has been no human trial that

242
00:12:34,919 --> 00:12:43,169
adequately tests the a1 a2 hypothesis

243
00:12:38,509 --> 00:12:45,659
there has been a small a2 company funded

244
00:12:43,169 --> 00:12:48,719
pilot trial involving just 41

245
00:12:45,659 --> 00:12:51,899
participants the study found that when

246
00:12:48,720 --> 00:12:55,080
given a 1 only milk the participants had

247
00:12:51,899 --> 00:12:57,709
softer stalls which is the opposite of

248
00:12:55,080 --> 00:13:01,170
what is predicted by the a1 a2

249
00:12:57,710 --> 00:13:04,560
hypothesis the paper's authors do

250
00:13:01,169 --> 00:13:08,129
suggest an alternative interpretation of

251
00:13:04,559 --> 00:13:11,129
the a1 a2 hypothesis that explains

252
00:13:08,129 --> 00:13:13,799
softer stools from a one protein may be

253
00:13:11,129 --> 00:13:15,929
due to get information however during

254
00:13:13,799 --> 00:13:17,849
the trial a measure forgot information

255
00:13:15,929 --> 00:13:20,799
found no significant difference between

256
00:13:17,850 --> 00:13:23,470
a1 and a2

257

00:13:20,799 --> 00:13:26,169
in summary leading health and nutrition

258
00:13:23,470 --> 00:13:28,990
associations including the dieticians

259
00:13:26,169 --> 00:13:31,719
Association of Australia Food Standards

260
00:13:28,990 --> 00:13:34,839
Australia New Zealand and the European

261
00:13:31,720 --> 00:13:37,870
Food Safety Authority have reviewed the

262
00:13:34,839 --> 00:13:40,120
evidence linking a 1 B 2 casein protein

263
00:13:37,870 --> 00:13:42,120
and human health outcomes all

264
00:13:40,120 --> 00:13:45,190
authorities have stated that there is

265
00:13:42,120 --> 00:13:49,690
insufficient evidence to support the a1

266
00:13:45,190 --> 00:13:52,720
a2 hypothesis how has the a2 milk

267
00:13:49,690 --> 00:13:55,570
template one consumer trust despite

268
00:13:52,720 --> 00:13:59,950
insufficient evidence to support the a1

269
00:13:55,570 --> 00:14:02,050
a2 hypothesis the a2 milk company has

270
00:13:59,950 --> 00:14:04,589
built its brand through marketing

271
00:14:02,049 --> 00:14:08,919

strategies that target consumers and

272

00:14:04,589 --> 00:14:10,990

health professionals the a2 milk company

273

00:14:08,919 --> 00:14:13,569

targets consumers with branded

274

00:14:10,990 --> 00:14:16,600

testimonials and builds a health halo

275

00:14:13,570 --> 00:14:19,300

for their products to also attract

276

00:14:16,600 --> 00:14:22,480

health seeking consumers who do not have

277

00:14:19,299 --> 00:14:24,819

an issue with milk the a2 milk company

278

00:14:22,480 --> 00:14:27,629

also targets health professionals

279

00:14:24,820 --> 00:14:31,329

including medical doctors and dietitians

280

00:14:27,629 --> 00:14:35,110

to gain health legitimacy quoting

281

00:14:31,328 --> 00:14:38,049

directly from the a2 milk companies 2015

282

00:14:35,110 --> 00:14:42,129

investor information healthcare

283

00:14:38,049 --> 00:14:45,009

professional programs are a key way of

284

00:14:42,129 --> 00:14:48,909

introducing a to milk company branded

285

00:14:45,009 --> 00:14:52,569

products to consumers so finally is

286
00:14:48,909 --> 00:14:55,120
there any harm in a2 milk well perhaps

287
00:14:52,570 --> 00:14:57,510
not directly because nutritionally a2

288
00:14:55,120 --> 00:15:00,399
milk is no different to regular milk

289
00:14:57,509 --> 00:15:03,189
however the a2 milk company is

290
00:15:00,399 --> 00:15:06,100
essentially introducing a new cost in

291
00:15:03,190 --> 00:15:08,230
the production and sale of milk there is

292
00:15:06,100 --> 00:15:10,959
also the potential for products that

293
00:15:08,230 --> 00:15:13,720
where a health halo to give consumers

294
00:15:10,958 --> 00:15:16,689
the false impression of making a healthy

295
00:15:13,720 --> 00:15:18,790
choice while diverting time and money

296
00:15:16,690 --> 00:15:21,899
away from important evidence-based

297
00:15:18,789 --> 00:15:21,899
health initiatives

298
00:15:22,159 --> 00:15:27,179
that's all for this week check out the

299
00:15:24,990 --> 00:15:30,840
show notes and skeptic sign for links to

300
00:15:27,179 --> 00:15:52,469
this story until next time bye from now

301
00:15:30,840 --> 00:15:55,470
for manually noble and now direct from

302
00:15:52,470 --> 00:16:03,300
the cafe at Australia's science channel

303
00:15:55,470 --> 00:16:06,330
its brouhaha with ben lewis US

304
00:16:03,299 --> 00:16:08,159
scientists have gone row 140 characters

305
00:16:06,330 --> 00:16:10,110
at a time they were ordered by the

306
00:16:08,159 --> 00:16:12,360
government to stop tweeting some valid

307
00:16:10,110 --> 00:16:15,360
back to scientific information from

308
00:16:12,360 --> 00:16:17,550
official house the fort band was setting

309
00:16:15,360 --> 00:16:20,310
up new unofficial accounts to keep that

310
00:16:17,549 --> 00:16:22,919
science coming so now you can space out

311
00:16:20,309 --> 00:16:25,169
with at NASA or get rebellious with at

312
00:16:22,919 --> 00:16:26,549
rogue NASA and if you want to check in

313
00:16:25,169 --> 00:16:28,740
with your favorite American National

314

00:16:26,549 --> 00:16:30,809
Park you're not just stuck with add

315
00:16:28,740 --> 00:16:34,680
National Park Service you can also

316
00:16:30,809 --> 00:16:37,199
follow at old us nat park sir you know

317
00:16:34,679 --> 00:16:39,659
what we're with them because talking

318
00:16:37,200 --> 00:16:41,900
about science is really important that's

319
00:16:39,659 --> 00:16:44,639
why we're here is why you're here to

320
00:16:41,899 --> 00:16:46,259
just ignoring scientific issues like

321
00:16:44,639 --> 00:16:49,409
climate change isn't going to make you

322
00:16:46,259 --> 00:16:51,090
go away it can feel like every day sighs

323
00:16:49,409 --> 00:16:54,419
plays a bigger and bigger role in our

324
00:16:51,090 --> 00:16:56,399
lives so every day it's more and more

325
00:16:54,419 --> 00:16:58,860
important to keep up the conversation

326
00:16:56,399 --> 00:16:59,350
and understand what's happening all

327
00:16:58,860 --> 00:17:01,539
around

328
00:16:59,350 --> 00:17:03,909

and to those scientists using their

329

00:17:01,539 --> 00:17:05,409

genius to get around gag orders we're on

330

00:17:03,909 --> 00:17:08,740

the side of open information and

331

00:17:05,410 --> 00:17:11,140

transparency well we support you and

332

00:17:08,740 --> 00:17:13,870

applaud you because science stories

333

00:17:11,140 --> 00:17:20,350

aren't just fun and fascinating they

334

00:17:13,869 --> 00:17:21,939

need to be told hashtag science here's a

335

00:17:20,349 --> 00:17:25,480

joke what do you get when you put

336

00:17:21,940 --> 00:17:27,549

together a bird and a human honey yeah

337

00:17:25,480 --> 00:17:30,549

okay that's not actually a joke but it

338

00:17:27,549 --> 00:17:32,559

is a thing honey guide birds and humans

339

00:17:30,549 --> 00:17:35,230

in Mozambique have a pretty sweet

340

00:17:32,559 --> 00:17:37,119

relationship humans make a call which

341

00:17:35,230 --> 00:17:39,700

attracts the birds who then guide the

342

00:17:37,119 --> 00:17:41,859

person to a beehive the human then

343
00:17:39,700 --> 00:17:44,580
cracks open the Beehive to get the honey

344
00:17:41,859 --> 00:17:49,119
and the bird face on the other contents

345
00:17:44,579 --> 00:17:51,309
the birds aren't trained to do this from

346
00:17:49,119 --> 00:17:53,259
farmyards to backyards there are plenty

347
00:17:51,309 --> 00:17:56,169
of times we've trained animals to help

348
00:17:53,259 --> 00:17:58,420
us but very rarely do we form a

349
00:17:56,170 --> 00:18:01,269
relationship with wild animal where the

350
00:17:58,420 --> 00:18:03,430
benefits go both ways and I like to

351
00:18:01,269 --> 00:18:06,329
think of birds as dinosaurs in disguise

352
00:18:03,430 --> 00:18:11,769
so it's kinda like teaming up the t-rex

353
00:18:06,329 --> 00:18:14,859
it's a whole new pecking order for more

354
00:18:11,769 --> 00:18:20,730
brouhaha and Australian science head for

355
00:18:14,859 --> 00:18:20,729
ww Australia science TV

356
00:18:22,720 --> 00:18:28,850
from the dawn of time one blood cast has

357
00:18:26,630 --> 00:18:31,220
unlocked the secrets of science and

358
00:18:28,849 --> 00:18:33,740
technology to enrich the lives of

359
00:18:31,220 --> 00:18:35,569
billions and now after a year where

360
00:18:33,740 --> 00:18:37,730
they've unlocked the Golden Age of

361
00:18:35,569 --> 00:18:41,839
knowledge they're about to get warp

362
00:18:37,730 --> 00:18:43,308
speed and go stratospheric hold up on Oh

363
00:18:41,839 --> 00:18:45,829
No Ross and Carrie we don't make

364
00:18:43,308 --> 00:18:47,990
extraordinary claims we investigate them

365
00:18:45,829 --> 00:18:50,329
we go undercover with fringe religious

366
00:18:47,990 --> 00:18:52,099
groups investigate paranormal claims and

367
00:18:50,329 --> 00:18:54,199
we participate in pseudo scientific

368
00:18:52,099 --> 00:18:56,298
medical treatments and then report our

369
00:18:54,200 --> 00:18:59,840
findings to you and yes we've even

370
00:18:56,298 --> 00:19:02,929
investigated Scientology crash new

371

00:18:59,839 --> 00:19:06,109
episodes every month at maximum fun org

372
00:19:02,929 --> 00:19:09,070
Oh No Ross and Carrie they show up so

373
00:19:06,109 --> 00:19:09,069
you don't have to

374
00:19:15,369 --> 00:19:21,319
from the website of Australian skeptics

375
00:19:18,380 --> 00:19:24,860
Australian skeptics com da to published

376
00:19:21,319 --> 00:19:30,429
on the six of every by Tim mendham Cairo

377
00:19:24,859 --> 00:19:30,429
group distances itself from anti-vaxxers

378
00:19:31,509 --> 00:19:37,519
the chiropractor's Association of

379
00:19:34,789 --> 00:19:39,649
Australia the largest professional group

380
00:19:37,519 --> 00:19:41,690
for chiropractors in the country has

381
00:19:39,650 --> 00:19:45,050
come down against the Australian

382
00:19:41,690 --> 00:19:47,690
vaccination skeptics network for linking

383
00:19:45,049 --> 00:19:52,279
itself to the chiropractor's Association

384
00:19:47,690 --> 00:19:54,670
of Australia or see a a it has also made

385
00:19:52,279 --> 00:19:57,109

the point that immunization is quote

386

00:19:54,670 --> 00:20:00,259
outside the scope of practice for

387

00:19:57,109 --> 00:20:02,329
chiropractors banquet this is an

388

00:20:00,259 --> 00:20:06,009
interesting admission as there are many

389

00:20:02,329 --> 00:20:08,240
members of the CAA who were or still are

390

00:20:06,009 --> 00:20:11,240
supporters of the anti-vaccination

391

00:20:08,240 --> 00:20:14,750
movement and who readily give advice on

392

00:20:11,240 --> 00:20:17,390
vaccinations usually in the negative in

393

00:20:14,750 --> 00:20:19,579
a statement released today the CAA says

394

00:20:17,390 --> 00:20:21,770
quote it has come to our attention that

395

00:20:19,579 --> 00:20:24,079
the Australian vaccination skeptics

396

00:20:21,769 --> 00:20:26,869
Network contains a link to the CAA

397

00:20:24,079 --> 00:20:29,389
national website we have requested that

398

00:20:26,869 --> 00:20:32,419
they remove this link to our website as

399

00:20:29,390 --> 00:20:34,400
a matter of urgency the chiropractor's

400
00:20:32,420 --> 00:20:37,039
Association of Australia does not

401
00:20:34,400 --> 00:20:39,650
support the views promoted by the

402
00:20:37,039 --> 00:20:42,500
Australian vaccination skeptics Network

403
00:20:39,650 --> 00:20:45,140
we have also informed them that the CAA

404
00:20:42,500 --> 00:20:48,289
has adopted the following policy on

405
00:20:45,140 --> 00:20:50,180
immunization the CAA supports the

406
00:20:48,289 --> 00:20:53,359
australian government's view that

407
00:20:50,180 --> 00:20:56,480
immunization is an important health care

408
00:20:53,359 --> 00:20:58,490
initiative it is outside the scope of

409
00:20:56,480 --> 00:21:00,860
practice for chiropractors when

410
00:20:58,490 --> 00:21:04,160
considering immunization parents should

411
00:21:00,859 --> 00:21:06,049
consult either with their GP or maternal

412
00:21:04,160 --> 00:21:09,440
and child health nurse for further

413
00:21:06,049 --> 00:21:11,720
information end quote it goes on to say

414
00:21:09,440 --> 00:21:13,509
that quote when providing chiropractic

415
00:21:11,720 --> 00:21:15,470
care to infants and young children

416
00:21:13,509 --> 00:21:17,480
practitioners must have a good

417
00:21:15,470 --> 00:21:19,789
understanding of the principles of

418
00:21:17,480 --> 00:21:22,490
public health care including disease

419
00:21:19,789 --> 00:21:25,339
prevention and health promotion end

420
00:21:22,490 --> 00:21:26,569
quote the practice of chiropractic

421
00:21:25,339 --> 00:21:28,459
treatment of

422
00:21:26,569 --> 00:21:30,319
infants and young children has been

423
00:21:28,460 --> 00:21:31,819
highly criticized by the Royal

424
00:21:30,319 --> 00:21:34,460
Australian College of General

425
00:21:31,819 --> 00:21:36,740
Practitioners Australian skeptics and

426
00:21:34,460 --> 00:21:38,929
others with the chiropractic Board of

427
00:21:36,740 --> 00:21:41,960
Australia the group that oversees the

428

00:21:38,929 --> 00:21:44,120
profession banning one chiropractor Ian

429
00:21:41,960 --> 00:21:46,788
Ross Perot from treating infants and

430
00:21:44,119 --> 00:21:49,849
performing spinal manipulative therapy

431
00:21:46,788 --> 00:21:53,119
on patients aged between two and six

432
00:21:49,849 --> 00:21:55,939
years this followed outrage over a video

433
00:21:53,119 --> 00:21:59,979
Ross Perot posted on YouTube showing him

434
00:21:55,940 --> 00:22:02,419
cracking the spine of a newborn baby and

435
00:21:59,980 --> 00:22:04,548
that comes to us from the website of

436
00:22:02,419 --> 00:22:06,799
Australian skeptics and I would add to

437
00:22:04,548 --> 00:22:08,690
that that it would be very good to see

438
00:22:06,798 --> 00:22:11,179
the chiropractor's Association of

439
00:22:08,690 --> 00:22:14,360
Australia make a policy announcement to

440
00:22:11,179 --> 00:22:18,440
their members that if they are to treat

441
00:22:14,359 --> 00:22:21,740
children in any way then those members

442
00:22:18,440 --> 00:22:25,639

should themselves be up to date on their

443

00:22:21,740 --> 00:22:29,089

vaccinations for especially pertussis

444

00:22:25,638 --> 00:22:31,428

whooping cough I wonder how that would

445

00:22:29,089 --> 00:22:35,209

go down with their general membership I

446

00:22:31,429 --> 00:22:37,220

wonder and why we are looking at that

447

00:22:35,210 --> 00:22:39,740

the website of Australian skeptics let's

448

00:22:37,220 --> 00:22:43,389

look at another article just posted on

449

00:22:39,740 --> 00:22:46,278

the 6th of february also by Tim mendham

450

00:22:43,388 --> 00:22:49,609

researchers warn of the dire effects of

451

00:22:46,278 --> 00:22:52,028

herbal remedies medical herbs herbal

452

00:22:49,609 --> 00:22:54,979

products / traders softer and more

453

00:22:52,028 --> 00:22:59,148

natural alternatives to prescription

454

00:22:54,980 --> 00:23:02,210

medication can have quote dire effects

455

00:22:59,148 --> 00:23:04,638

and quote on users including acute

456

00:23:02,210 --> 00:23:06,679

hepatic and renal failure accessor

457
00:23:04,638 --> 00:23:10,069
Bation of pre-existing conditions and

458
00:23:06,679 --> 00:23:13,669
diseases and even death these are the

459
00:23:10,069 --> 00:23:15,859
worrying results presented in a paper by

460
00:23:13,669 --> 00:23:17,990
four Australian University researchers

461
00:23:15,859 --> 00:23:21,469
published recently in the medical

462
00:23:17,990 --> 00:23:24,230
journal of Australia titled quote what

463
00:23:21,470 --> 00:23:26,389
risks do her balad expose to the

464
00:23:24,230 --> 00:23:28,819
Australian community in quite the paper

465
00:23:26,388 --> 00:23:30,979
says that an estimated seventy to eighty

466
00:23:28,819 --> 00:23:33,648
percent of the world's population use

467
00:23:30,980 --> 00:23:35,960
non Western medicine in the form of

468
00:23:33,648 --> 00:23:38,058
herbal preparations for their primary

469
00:23:35,960 --> 00:23:40,169
health care the proportion of the

470
00:23:38,058 --> 00:23:42,868
Australian population using herbal

471
00:23:40,169 --> 00:23:45,570
products as mono or ancillary therapy

472
00:23:42,868 --> 00:23:47,970
increased from forty eight percent in

473
00:23:45,569 --> 00:23:51,960
nineteen ninety six to sixty nine

474
00:23:47,970 --> 00:23:54,538
percent in 2005 with spending on

475
00:23:51,960 --> 00:23:56,519
complementary medicine increasing by

476
00:23:54,538 --> 00:24:01,769
more than one hundred percent between

477
00:23:56,519 --> 00:24:04,079
1996 and 2004 similar increases have

478
00:24:01,769 --> 00:24:06,929
been reported in many Western countries

479
00:24:04,079 --> 00:24:10,579
in the United States spending on herbal

480
00:24:06,929 --> 00:24:13,470
preparations doubled between 1997 and

481
00:24:10,579 --> 00:24:15,418
2007 the predominant user group of

482
00:24:13,470 --> 00:24:18,450
complementary medicines in Australia

483
00:24:15,419 --> 00:24:21,659
comprises younger women under 35 years

484
00:24:18,450 --> 00:24:23,639
old with a tertiary education people

485

00:24:21,659 --> 00:24:27,330
with chronic diseases or comorbidities

486
00:24:23,638 --> 00:24:30,329
such as cancer diabetes musculoskeletal

487
00:24:27,329 --> 00:24:33,388
disorders or mental issues frequently use

488
00:24:30,329 --> 00:24:35,368
complementary medicines a study of ten

489
00:24:33,388 --> 00:24:39,058
thousand and eleven Australian women

490
00:24:35,368 --> 00:24:41,368
aged between 59 and 60 for years found

491
00:24:39,058 --> 00:24:43,589
that thirty-nine percent of those with

492
00:24:41,368 --> 00:24:46,168
menopausal symptoms consulted

493
00:24:43,589 --> 00:24:49,730
complementary medicine practitioners and

494
00:24:46,169 --> 00:24:52,230
that 75% used self-prescribed

495
00:24:49,730 --> 00:24:55,710
complementary therapies fifty-three

496
00:24:52,230 --> 00:24:58,589
percent of 1037 people with HIV

497
00:24:55,710 --> 00:25:00,960
attending specialist clinics also used

498
00:24:58,589 --> 00:25:03,238
complementary medicines and as many as

499
00:25:00,960 --> 00:25:07,200

sixty five percent of Australian people

500

00:25:03,239 --> 00:25:09,720

with cancer in 2010 used some form of

501

00:25:07,200 --> 00:25:11,940

complementary medicine more than half of

502

00:25:09,720 --> 00:25:14,960

whom did so in combination with

503

00:25:11,940 --> 00:25:17,730

conventional therapy quote despite these

504

00:25:14,960 --> 00:25:20,778

trends in quote the authorities say

505

00:25:17,730 --> 00:25:23,548

quote there have been few recent

506

00:25:20,778 --> 00:25:25,950

investigations of the specific problems

507

00:25:23,548 --> 00:25:28,918

associated with the use of herbal

508

00:25:25,950 --> 00:25:31,950

medicines and assessments of their

509

00:25:28,919 --> 00:25:34,470

safety rely on older studies some

510

00:25:31,950 --> 00:25:38,038

traditional herbal preparations contain

511

00:25:34,470 --> 00:25:40,649

heavy metals and toxic chemicals as well

512

00:25:38,038 --> 00:25:43,888

as naturally occurring organic toxins

513

00:25:40,648 --> 00:25:46,469

while many may have been safe it is

514
00:25:43,888 --> 00:25:48,538
worrying that the specific effects and

515
00:25:46,470 --> 00:25:51,389
harmful interactions of a number of

516
00:25:48,538 --> 00:25:53,529
their components with prescription

517
00:25:51,388 --> 00:25:56,500
medications is not well understood

518
00:25:53,529 --> 00:25:58,629
the content and quality of herbal

519
00:25:56,500 --> 00:26:01,240
preparations are not tightly controlled

520
00:25:58,630 --> 00:26:03,550
with some ingredients either not listed

521
00:26:01,240 --> 00:26:06,700
or their concentrations recorded in

522
00:26:03,549 --> 00:26:08,829
accurately on websites or labels herbal

523
00:26:06,700 --> 00:26:12,880
products may also include illegal

524
00:26:08,829 --> 00:26:15,669
ingredients such as ephedra European

525
00:26:12,880 --> 00:26:17,980
wild ginger and endangered animal

526
00:26:15,670 --> 00:26:20,740
species such as Snow Leopard an

527
00:26:17,980 --> 00:26:23,470
additional problem is augmentation with

528
00:26:20,740 --> 00:26:26,130
prescription medicines to enhance the

529
00:26:23,470 --> 00:26:29,259
apparent effectiveness of a preparation

530
00:26:26,130 --> 00:26:33,190
toxic substances may also be

531
00:26:29,259 --> 00:26:35,829
deliberately or inadvertently added less

532
00:26:33,190 --> 00:26:38,049
expensive more harmful plants may be

533
00:26:35,829 --> 00:26:40,869
substituted for more expensive

534
00:26:38,049 --> 00:26:43,539
ingredients and processing may not be

535
00:26:40,869 --> 00:26:45,669
adequate the lack of regulation and

536
00:26:43,539 --> 00:26:47,529
monitoring of traditional herbal

537
00:26:45,670 --> 00:26:49,690
preparations in Australia and other

538
00:26:47,529 --> 00:26:51,940
Western countries means that their

539
00:26:49,690 --> 00:26:54,970
contribution to illness and death is

540
00:26:51,940 --> 00:26:56,799
unknown we need to raise awareness of

541
00:26:54,970 --> 00:26:59,289
these problems with health care

542

00:26:56,799 --> 00:27:03,669
practitioners and with the general

543
00:26:59,289 --> 00:27:05,680
public end quote sadly this comes as no

544
00:27:03,670 --> 00:27:07,960
surprise to the Australian skeptics and

545
00:27:05,680 --> 00:27:11,670
other skeptics around the world I'm sure

546
00:27:07,960 --> 00:27:14,819
as we've known for a long time that that

547
00:27:11,670 --> 00:27:17,769
many of these remedies coming out of

548
00:27:14,819 --> 00:27:20,439
well mostly China i would suggest but by

549
00:27:17,769 --> 00:27:23,430
many other places too aren't regulated

550
00:27:20,440 --> 00:27:26,170
we don't know what's in them exactly and

551
00:27:23,430 --> 00:27:29,080
well the romance attached to them gets a

552
00:27:26,170 --> 00:27:32,980
lot of people in the logical fallacy of

553
00:27:29,079 --> 00:27:34,929
the the natural that's natural it must

554
00:27:32,980 --> 00:27:37,779
be good as ancient it must be good the

555
00:27:34,930 --> 00:27:40,630
appeal to ancient wisdom or as it's

556
00:27:37,779 --> 00:27:41,829

known the appeal to antiquity this has

557

00:27:40,630 --> 00:27:43,690

been used for thousands of years

558

00:27:41,829 --> 00:27:46,000

therefore it must be good this is from

559

00:27:43,690 --> 00:27:48,340

another more enlightened spiritual

560

00:27:46,000 --> 00:27:50,769

culture therefore it must be good but of

561

00:27:48,339 --> 00:27:52,980

course a market is a market and if

562

00:27:50,769 --> 00:27:57,129

people can cheat and cut corners

563

00:27:52,980 --> 00:28:00,309

sometimes they do sadly and what people

564

00:27:57,130 --> 00:28:03,580

get in there herbal preparations is

565

00:28:00,309 --> 00:28:06,039

proving in some cases not to be what

566

00:28:03,579 --> 00:28:06,908

they expected to get if indeed that ever

567

00:28:06,039 --> 00:28:08,648

worked in the

568

00:28:06,909 --> 00:28:11,379

first place so that's a very interesting

569

00:28:08,648 --> 00:28:15,548

story one for us to keep an eye on again

570

00:28:11,378 --> 00:28:17,918

for your reference head to skeptics com

571
00:28:15,548 --> 00:28:20,288
au the website of us trained skeptics

572
00:28:17,919 --> 00:28:22,720
lots more information there and as we

573
00:28:20,288 --> 00:28:24,638
mentioned from time to time if you visit

574
00:28:22,720 --> 00:28:26,798
that website you can help yourself to

575
00:28:24,638 --> 00:28:29,918
over 30 years papi something like 35

576
00:28:26,798 --> 00:28:32,648
years of the skeptic magazine the

577
00:28:29,919 --> 00:28:35,019
journal from Australian skeptics in PDF

578
00:28:32,648 --> 00:28:39,449
form there's a search option on the

579
00:28:35,019 --> 00:28:42,368
website too and you can search through

580
00:28:39,450 --> 00:28:45,340
thousands and thousands of interviews

581
00:28:42,368 --> 00:28:47,978
and reports and analysis but thank you

582
00:28:45,339 --> 00:28:51,329
to the editor of the skeptic magazine in

583
00:28:47,979 --> 00:28:55,979
mendham compiling those two reports on

584
00:28:51,329 --> 00:28:55,978
chiropractic and herbal medicine

585
00:28:59,589 --> 00:29:12,230
[Music]

586
00:29:18,680 --> 00:29:24,950
hey Richard oh hi Trish hi would you

587
00:29:23,240 --> 00:29:27,140
like a coffee yeah thanks what you're

588
00:29:24,950 --> 00:29:29,539
working on trying to come up with a new

589
00:29:27,140 --> 00:29:32,330
promo to play on the skeptic zone who's

590
00:29:29,539 --> 00:29:34,759
it for the good thinking society in the

591
00:29:32,329 --> 00:29:37,099
UK you know Michael Marshall Simon Singh

592
00:29:34,759 --> 00:29:38,869
Nora Thomas and background oh yeah I

593
00:29:37,099 --> 00:29:41,379
know them they've been doing some great

594
00:29:38,869 --> 00:29:44,299
work investigating veterinary homeopathy

595
00:29:41,380 --> 00:29:46,730
vetri homeopathy what you sugarpill this

596
00:29:44,299 --> 00:29:48,019
for cows I know right and also they're

597
00:29:46,730 --> 00:29:50,809
looking at some of the dodgy medical

598
00:29:48,019 --> 00:29:52,430
advice given by UK chiropractors really

599

00:29:50,809 --> 00:29:56,210
okay look I'll mention all that in the

600
00:29:52,430 --> 00:30:00,140
promo now their website is good thinking

601
00:29:56,210 --> 00:30:01,819
society gone and they've recently been

602
00:30:00,140 --> 00:30:03,530
reporting on the resurgence of faith

603
00:30:01,819 --> 00:30:05,839
healer peter Popoff you know come on

604
00:30:03,529 --> 00:30:17,450
right okay look thanks to that it gives

605
00:30:05,839 --> 00:30:19,959
me something good to think about on the

606
00:30:17,450 --> 00:30:23,090
evening of saturday the 11th of febr

607
00:30:19,960 --> 00:30:25,819
2017 i found myself of the stranger

608
00:30:23,089 --> 00:30:28,009
things down under facebook group as we

609
00:30:25,819 --> 00:30:31,759
made our way to the rocks here in sydney

610
00:30:28,009 --> 00:30:33,559
be historic area of sydney we were there

611
00:30:31,759 --> 00:30:38,420
for a ghost tour run by the good people

612
00:30:33,559 --> 00:30:40,250
at ghost tours com delay you to

613
00:30:38,420 --> 00:30:42,050

experience the chills well we were

614

00:30:40,250 --> 00:30:47,660

hoping to experience the chills whistle

615

00:30:42,049 --> 00:30:49,460

was very hot of the sydney ghosts did we

616

00:30:47,660 --> 00:30:52,009

find any ghosts well i don't want to

617

00:30:49,460 --> 00:30:54,140

disappoint you what we did find was a

618

00:30:52,009 --> 00:30:57,190

wonderful evening out with lots of

619

00:30:54,140 --> 00:30:57,190

laughs and history

620

00:30:58,940 --> 00:31:03,548

[Music]

621

00:31:01,778 --> 00:31:06,989

I'm speaking to you from the train

622

00:31:03,548 --> 00:31:06,989

station at Circular key

623

00:31:09,308 --> 00:31:14,528

circular key is the area in Sydney where

624

00:31:12,038 --> 00:31:18,240

the fairies leave from the go around the

625

00:31:14,528 --> 00:31:21,720

harbour past the Sydney Opera House and

626

00:31:18,240 --> 00:31:25,509

today's they apparently it's a record

627

00:31:21,720 --> 00:31:27,700

heat wave day for Sydney some parts of

628
00:31:25,509 --> 00:31:33,128
it at least and I can vouch for that

629
00:31:27,700 --> 00:31:34,778
it's tremendously hot and people are

630
00:31:33,128 --> 00:31:37,058
walking around looking a bit dazed that

631
00:31:34,778 --> 00:31:40,058
must admit anyway I've come downtown

632
00:31:37,058 --> 00:31:42,548
today to take part in the first event

633
00:31:40,058 --> 00:31:46,178
and put together by stranger things down

634
00:31:42,548 --> 00:31:48,788
under the new facebook social group for

635
00:31:46,179 --> 00:31:52,028
skeptics and interested people in Sydney

636
00:31:48,788 --> 00:31:54,898
and tonight we're doing the famous rocks

637
00:31:52,028 --> 00:31:54,898
ghost tour

638
00:32:00,490 --> 00:32:07,450
and despite the despite their ridiculous

639
00:32:04,990 --> 00:32:09,940
temperature today lots of people around

640
00:32:07,450 --> 00:32:11,380
this area it's six o'clock in the

641
00:32:09,940 --> 00:32:13,299
evening it's a very popular tourist

642
00:32:11,380 --> 00:32:16,840
destination of course and it's a

643
00:32:13,299 --> 00:32:21,720
Saturday but I you can see there the

644
00:32:16,839 --> 00:32:24,009
shimmering heat haze and everybody is

645
00:32:21,720 --> 00:32:28,600
dressed in as little as they can

646
00:32:24,009 --> 00:32:30,369
possibly get away with today well of

647
00:32:28,599 --> 00:32:32,049
course longtime listeners that the

648
00:32:30,369 --> 00:32:33,428
skeptical zone will look well remember our

649
00:32:32,049 --> 00:32:35,019
chief investigator Australian

650
00:32:33,429 --> 00:32:38,019
skeptically and Bryce hello Ian oh hi

651
00:32:35,019 --> 00:32:39,910
Richard now we're walking along we just

652
00:32:38,019 --> 00:32:41,769
had a nice drinking in the pub before

653
00:32:39,910 --> 00:32:44,500
the tour because it's so hot we all

654
00:32:41,769 --> 00:32:47,849
retreated and drowned our hot sorrows

655
00:32:44,500 --> 00:32:50,410
but now we're walking down George Street

656

00:32:47,849 --> 00:32:53,230
right at the rocks here very historic

657
00:32:50,410 --> 00:32:55,600
area of Sydney to the ghost to it now

658
00:32:53,230 --> 00:32:58,990
how many ghosts are you expecting to see

659
00:32:55,599 --> 00:33:01,000
tonight here oh well haha that's a bit

660
00:32:58,990 --> 00:33:03,308
of an unfair question for a skeptic I'd

661
00:33:01,000 --> 00:33:06,429
like to see many that's a good answer

662
00:33:03,308 --> 00:33:08,379
we'd like to see many we would the Sun

663
00:33:06,429 --> 00:33:10,420
is just going down now and thankfully

664
00:33:08,380 --> 00:33:12,429
it's cooled off a little bit yes it

665
00:33:10,420 --> 00:33:15,190
reached about 40 degrees today I think

666
00:33:12,429 --> 00:33:18,059
which is only record in some areas of

667
00:33:15,190 --> 00:33:21,730
Sydney it went to 45 let's go hood I

668
00:33:18,058 --> 00:33:24,190
wish for our American listeners is well

669
00:33:21,730 --> 00:33:26,799
over a hundred well over 100 hundred and

670
00:33:24,190 --> 00:33:29,140

gin or something stupid like that but

671

00:33:26,799 --> 00:33:30,940

we're just as a nice group of skeptics

672

00:33:29,140 --> 00:33:34,450

here from the strong skeptics committee

673

00:33:30,940 --> 00:33:36,549

and some friends and here we are walking

674

00:33:34,450 --> 00:33:39,759

down which is turning now heading

675

00:33:36,549 --> 00:33:42,940

towards Cadman's cottage which is one of

676

00:33:39,759 --> 00:33:46,720

the very oldest buildings in Sydney

677

00:33:42,940 --> 00:33:47,890

where the ghost tours start from and oh

678

00:33:46,720 --> 00:33:49,539

I'm here with actually one of the

679

00:33:47,890 --> 00:33:51,759

organizers have strange things down

680

00:33:49,539 --> 00:33:55,119

under its trish and hello Trish hello

681

00:33:51,759 --> 00:33:59,379

Richard oh you know Trish from the ad we

682

00:33:55,119 --> 00:34:01,750

do for the new tactic of the sound of me

683

00:33:59,380 --> 00:34:03,670

but my voice is but out official just

684

00:34:01,750 --> 00:34:06,210

night singing along to guns and roses oh

685
00:34:03,670 --> 00:34:09,519
you and your guns and roses

686
00:34:06,210 --> 00:34:12,190
you're the voice that says um yeah would

687
00:34:09,519 --> 00:34:13,838
you like a coffee yeah thanks yes indeed

688
00:34:12,190 --> 00:34:16,389
that's me Oh Michael Marshall and his

689
00:34:13,838 --> 00:34:18,519
choice so we're you you're one of the

690
00:34:16,389 --> 00:34:20,440
organizers of strange vision yeah what's

691
00:34:18,519 --> 00:34:21,639
the whole idea about this and we're just

692
00:34:20,440 --> 00:34:23,588
getting out on the ground and just

693
00:34:21,639 --> 00:34:25,389
investigating you know what's what's out

694
00:34:23,588 --> 00:34:27,309
and what's what's available to the

695
00:34:25,389 --> 00:34:28,838
public so we're still kind of

696
00:34:27,309 --> 00:34:31,389
brainstorming what our first few ideas

697
00:34:28,838 --> 00:34:32,739
are going to be um this is quite a good

698
00:34:31,389 --> 00:34:34,389
one to start with because it's very well

699
00:34:32,739 --> 00:34:36,908
organized by an outside company so they

700
00:34:34,389 --> 00:34:38,378
can take us and shot what the deal is

701
00:34:36,909 --> 00:34:41,200
we'll see how much we're there is and

702
00:34:38,378 --> 00:34:43,179
how much history there is and I I would

703
00:34:41,199 --> 00:34:45,428
imagine the idea isn't to approach this

704
00:34:43,179 --> 00:34:48,099
as you saw it or we're skipping I met

705
00:34:45,429 --> 00:34:49,898
let's just have a nice social night out

706
00:34:48,099 --> 00:34:51,609
and just and see what what it's all

707
00:34:49,898 --> 00:34:52,838
about I mean you know I normally

708
00:34:51,608 --> 00:34:54,219
probably wouldn't come along something

709
00:34:52,838 --> 00:34:55,539
like this but with a group of friends so

710
00:34:54,219 --> 00:34:58,269
I know we can have it over laugh about

711
00:34:55,539 --> 00:35:00,369
it afterwards perfect absolutely i

712
00:34:58,269 --> 00:35:02,829
totally agree well you know Trish I

713

00:35:00,369 --> 00:35:09,940
think that's good thinking absolutely

714
00:35:02,829 --> 00:35:12,519
yeah it's very good very good ouch those

715
00:35:09,940 --> 00:35:16,000
ghostly things it's Ali Thea Dean hello

716
00:35:12,519 --> 00:35:18,730
Olivia I Richard no spooky action from

717
00:35:16,000 --> 00:35:20,349
close up from closer I hope so now

718
00:35:18,730 --> 00:35:22,150
listeners may well remember Lee Thea

719
00:35:20,349 --> 00:35:24,070
because we did a get ghost to her a

720
00:35:22,150 --> 00:35:26,019
couple years ago at the fields of my

721
00:35:24,070 --> 00:35:28,269
cemetery with me night didn't we that

722
00:35:26,019 --> 00:35:30,400
was a ghost hunt oh I'm sorry a hunt yes

723
00:35:28,269 --> 00:35:33,579
we're hunting as you say and I thought

724
00:35:30,400 --> 00:35:36,460
you did very well yes I I don't know I

725
00:35:33,579 --> 00:35:39,400
didn't find any but I mean you coped

726
00:35:36,460 --> 00:35:41,250
very well I should say that yeah we cope

727
00:35:39,400 --> 00:35:44,800

very well with the with a Ouija board

728

00:35:41,250 --> 00:35:46,690

and the spirit box Barry box you have

729

00:35:44,800 --> 00:35:47,830

forgot about that it was great fun

730

00:35:46,690 --> 00:35:50,139

though wasn't it was really enjoyable

731

00:35:47,829 --> 00:35:51,940

night tonight's gonna be a bit more

732

00:35:50,139 --> 00:35:55,139

passive though I think so we're going to

733

00:35:51,940 --> 00:35:57,760

be taken on ghost tour by a guide and

734

00:35:55,139 --> 00:35:59,650

given some good spooky yarns I hope and

735

00:35:57,760 --> 00:36:02,470

I've just noticed that our guide tonight

736

00:35:59,650 --> 00:36:04,269

is a good old friend of mine de Rouen

737

00:36:02,469 --> 00:36:06,669

Road and grieve so I've known for many

738

00:36:04,269 --> 00:36:08,559

years and whose sure to give us a

739

00:36:06,670 --> 00:36:10,389

wonderful evening and wonderful goes to

740

00:36:08,559 --> 00:36:12,309

her I'm looking forward to I don't know

741

00:36:10,389 --> 00:36:14,420

looking forward to something chillin

742
00:36:12,309 --> 00:36:17,119
that should make a difference

743
00:36:14,420 --> 00:36:18,849
look we own it we all need a good chill

744
00:36:17,119 --> 00:36:21,740
down the spine tonight don't we

745
00:36:18,849 --> 00:36:24,318
definitely 40 degree heat and Sydney

746
00:36:21,739 --> 00:36:27,529
right now quick something for you govern

747
00:36:24,318 --> 00:36:31,039
across here and there right there will

748
00:36:27,530 --> 00:36:33,470
be loving terrain and now we have a

749
00:36:31,039 --> 00:36:35,659
dragon ask you do i turn off your

750
00:36:33,469 --> 00:36:39,169
torches come on I'll get the salt a bit

751
00:36:35,659 --> 00:36:41,298
be all good people to face tether

752
00:36:39,170 --> 00:36:42,680
ghostly believers in residence so

753
00:36:41,298 --> 00:36:48,679
without trying to listen anyone's eyes

754
00:36:42,679 --> 00:36:50,149
you can see that's already played now

755
00:36:48,679 --> 00:36:52,578
the two is well underway we're in

756
00:36:50,150 --> 00:36:54,139
captain's cottage one of the oldest

757
00:36:52,579 --> 00:36:56,839
buildings or the oldest building in New

758
00:36:54,139 --> 00:36:58,670
South Wales and people are wandering

759
00:36:56,838 --> 00:37:02,210
around with torches trying to inspect

760
00:36:58,670 --> 00:37:04,639
the the historic relics here it's very

761
00:37:02,210 --> 00:37:08,210
said it's a bit spooky I must admit a

762
00:37:04,639 --> 00:37:10,098
little bit a little bit eerie our chief

763
00:37:08,210 --> 00:37:13,039
investigators got lost in the chimney

764
00:37:10,099 --> 00:37:16,338
yes did you find it in spiders in no

765
00:37:13,039 --> 00:37:21,558
ghosts oh well I think there were laws

766
00:37:16,338 --> 00:37:24,108
because of Santa closet and we'll just

767
00:37:21,559 --> 00:37:26,210
walk outside now apart from anything

768
00:37:24,108 --> 00:37:29,058
else i must say that these ghost tours

769
00:37:26,210 --> 00:37:31,818
often give give you an excellent

770

00:37:29,059 --> 00:37:34,970
opportunity to look at historic bits of

771
00:37:31,818 --> 00:37:38,808
Sydney or any city it's it's quite

772
00:37:34,969 --> 00:37:40,879
fascinating we'll come back out now it's

773
00:37:38,809 --> 00:37:43,010
a fascinating place indeed but foxfire's

774
00:37:40,880 --> 00:37:44,750
point in organ embassy estate the group

775
00:37:43,010 --> 00:37:46,609
he broke into the coxswains biochim

776
00:37:44,750 --> 00:37:48,349
spraying into the fire bus he was

777
00:37:46,608 --> 00:37:50,420
carrying in there that's where he was

778
00:37:48,349 --> 00:37:52,160
arrested and taken the Sydney joke where

779
00:37:50,420 --> 00:37:53,869
he spent three months until he was taken

780
00:37:52,159 --> 00:37:57,699
to hang on skill very true we pay for

781
00:37:53,869 --> 00:37:57,700
his crime now many people came

782
00:38:07,409 --> 00:38:13,059
breaking up with some mechanics pray for

783
00:38:09,909 --> 00:38:17,989
me room to room you go two and one two

784
00:38:13,059 --> 00:38:26,460

three we got to bring out today

785

00:38:17,989 --> 00:38:26,459

[Music]

786

00:38:27,679 --> 00:38:34,799

we're inside the haunted room Jessica I

787

00:38:31,590 --> 00:38:37,320

don't feel anything I'm so sorry i feel

788

00:38:34,800 --> 00:38:41,310

warm it's warm in here yeah it is warm

789

00:38:37,320 --> 00:38:44,940

yeah yeah it's am very warm night to be

790

00:38:41,309 --> 00:38:46,500

walking around and OH someone's just

791

00:38:44,940 --> 00:38:50,429

turned the light on and off to give us a

792

00:38:46,500 --> 00:38:53,550

scare it did work people people reacted

793

00:38:50,429 --> 00:38:59,539

I was hoping for a cold shiver down the

794

00:38:53,550 --> 00:38:59,539

spine tonight you'll need it that's cool

795

00:39:00,409 --> 00:39:07,589

we've come to the very top of this house

796

00:39:04,619 --> 00:39:09,000

of the rocks here and most of the rooms

797

00:39:07,590 --> 00:39:12,750

are dark except when people turn on

798

00:39:09,000 --> 00:39:15,510

those yeah mr. downs just being filled

799

00:39:12,750 --> 00:39:18,449

out and the skeptics are arguing about a

800

00:39:15,510 --> 00:39:23,030

hole in the wall is that a fireplace a

801

00:39:18,449 --> 00:39:25,259

resort not come through to another room

802

00:39:23,030 --> 00:39:26,760

it's amazing that this Trish it's

803

00:39:25,260 --> 00:39:28,830

amazing in this house is here and

804

00:39:26,760 --> 00:39:30,990

basically unused yeah it's bigger than

805

00:39:28,829 --> 00:39:32,519

most apartments it's huge it goes on

806

00:39:30,989 --> 00:39:34,619

each room is bigger than every apartment

807

00:39:32,519 --> 00:39:36,480

i've ever lived in we could still go I

808

00:39:34,619 --> 00:39:38,849

know it doesn't get up that's nice is it

809

00:39:36,480 --> 00:39:42,309

there's another room here well and

810

00:39:38,849 --> 00:39:44,599

what's that it's a working holiday

811

00:39:42,309 --> 00:39:46,849

do you think it's a chimney it's got a

812

00:39:44,599 --> 00:39:51,618

big cockroach in the bottom a big

813
00:39:46,849 --> 00:39:55,940
cockroach about you I never knew this

814
00:39:51,619 --> 00:39:57,500
place was here it's fascinating thank

815
00:39:55,940 --> 00:39:59,329
you again and in the words of Alfred

816
00:39:57,500 --> 00:40:01,429
Hitchcock or any of you might be old

817
00:39:59,329 --> 00:40:03,440
enough to remember the babies I goes

818
00:40:01,429 --> 00:40:08,179
toaster oh now I just want guess you all

819
00:40:03,440 --> 00:40:14,869
a very good evening good evening in

820
00:40:08,179 --> 00:40:16,279
pencil turn on your tortures have a good

821
00:40:14,869 --> 00:40:18,170
walk around I'll be on the top of

822
00:40:16,280 --> 00:40:20,750
interesting collect them and totally do

823
00:40:18,170 --> 00:40:23,909
that towards where to start

824
00:40:20,750 --> 00:40:23,909
[Music]

825
00:40:25,190 --> 00:40:33,380
a big thank you to our ghost tour guide

826
00:40:29,300 --> 00:40:37,130
Rowan Greaves who persevered with us

827

00:40:33,380 --> 00:40:39,500
through outrageous temperatures we were

828
00:40:37,130 --> 00:40:41,660
all a sweaty mess during the whole tour

829
00:40:39,500 --> 00:40:43,670
the temperature really didn't cool down

830
00:40:41,659 --> 00:40:46,460
but Rowan Greaves always the

831
00:40:43,670 --> 00:40:48,050
professional carried on and if you're

832
00:40:46,460 --> 00:40:51,289
tempted to do the ghost tour just hit

833
00:40:48,050 --> 00:40:52,640
for ghost tours com dot a you to find

834
00:40:51,289 --> 00:40:55,059
out more information but I would

835
00:40:52,639 --> 00:40:58,338
probably recommend you don't do the tour

836
00:40:55,059 --> 00:41:00,230
during a heatwave I think the ghosts

837
00:40:58,338 --> 00:41:02,420
were probably on strike they probably

838
00:41:00,230 --> 00:41:04,190
went down to the South Pole to join Paul

839
00:41:02,420 --> 00:41:06,200
Willis in fact I think that's where all

840
00:41:04,190 --> 00:41:08,568
the curse were but now a great night out

841
00:41:06,199 --> 00:41:10,689

and I look forward to the next adventure

842

00:41:08,568 --> 00:41:13,489

with stranger things down under and

843

00:41:10,690 --> 00:41:15,730

links to all of that in this week's show

844

00:41:13,489 --> 00:41:15,729

notes

845

00:41:19,940 --> 00:41:23,280

[Music]

846

00:41:25,260 --> 00:41:30,730

it never ends a friend starts talking

847

00:41:28,510 --> 00:41:32,320

about his new Reiki Master and someone

848

00:41:30,730 --> 00:41:35,050

else just posted about another

849

00:41:32,320 --> 00:41:37,539

all-natural cancer cure that they don't

850

00:41:35,050 --> 00:41:39,789

want you to know about a skeptics we

851

00:41:37,539 --> 00:41:41,920

dedicate a lot of time trying to protect

852

00:41:39,789 --> 00:41:44,110

those around us but there's a way that

853

00:41:41,920 --> 00:41:46,720

you can reach millions guerrilla

854

00:41:44,110 --> 00:41:48,610

skepticism on Wikipedia is a group that

855

00:41:46,719 --> 00:41:51,039

is working to keep the best skeptical

856
00:41:48,610 --> 00:41:54,160
information at everyone's fingertips in

857
00:41:51,039 --> 00:41:56,860
all languages join us training is

858
00:41:54,159 --> 00:41:59,589
self-paced and fun and we have our very

859
00:41:56,860 --> 00:42:02,079
own super secret Facebook group you will

860
00:41:59,590 --> 00:42:06,390
be educating the world in your sleep to

861
00:42:02,079 --> 00:42:10,480
find out more email us at GS o w team @

862
00:42:06,389 --> 00:42:15,599
gmail.com guerrilla skepticism the time

863
00:42:10,480 --> 00:42:21,239
is now music by ben sound calm

864
00:42:15,599 --> 00:42:21,239
[Music]

865
00:42:25,949 --> 00:42:31,359
thank you for listening to the skeptic

866
00:42:28,449 --> 00:42:32,949
zone well tomorrow i'm jumping on a

867
00:42:31,360 --> 00:42:35,230
plane and heading down to Melbourne for

868
00:42:32,949 --> 00:42:38,859
a few days to see my old friend and UFO

869
00:42:35,230 --> 00:42:40,510
expert dr. Steve Roberts we really nice

870
00:42:38,860 --> 00:42:42,910
to catch up with him and catch up with a

871
00:42:40,510 --> 00:42:45,010
few of my friends down there in

872
00:42:42,909 --> 00:42:46,539
Melbourne and then I'll be spending a

873
00:42:45,010 --> 00:42:48,340
few days with a nut male friend Jim

874
00:42:46,539 --> 00:42:50,679
wilshire now Jim is the man who does the

875
00:42:48,340 --> 00:42:52,480
voice over at the beginning of the

876
00:42:50,679 --> 00:42:55,449
skeptical zone that's the voice you hear

877
00:42:52,480 --> 00:42:58,389
every week welcome to the skeptical zone

878
00:42:55,449 --> 00:43:01,839
the podcast from Australia for science

879
00:42:58,389 --> 00:43:04,750
and reason a very dear old friend of

880
00:43:01,840 --> 00:43:08,140
mine of course and he was a very big

881
00:43:04,750 --> 00:43:11,710
radio star in the in the 70 in the 80s

882
00:43:08,139 --> 00:43:15,009
and the 90s and now he retired and lives

883
00:43:11,710 --> 00:43:17,349
on a farm a really nice place to be in

884

00:43:15,010 --> 00:43:20,140
the Albury Wodonga area I hope the

885
00:43:17,349 --> 00:43:22,000
weather cools down a bit before then so

886
00:43:20,139 --> 00:43:24,150
next week so I expect to have interviews

887
00:43:22,000 --> 00:43:27,969
with steve roberts and well who knows

888
00:43:24,150 --> 00:43:31,450
who knows what maybe we'll look for UFOs

889
00:43:27,969 --> 00:43:33,250
in the countryside until then and i hope

890
00:43:31,449 --> 00:43:36,399
this hot weather goes away very quickly

891
00:43:33,250 --> 00:43:42,699
this is Richard Saunders melting from

892
00:43:36,400 --> 00:43:45,220
Sydney Australia you've been listening

893
00:43:42,699 --> 00:43:48,759
to the sceptics own podcast visit our

894
00:43:45,219 --> 00:43:51,009
website at wwc a petting zoo TV for

895
00:43:48,760 --> 00:43:55,390
contacts an archive of all episodes

896
00:43:51,010 --> 00:43:57,550
since 2008 and our online store please

897
00:43:55,389 --> 00:44:00,849
support the skeptic zone by following us

898
00:43:57,550 --> 00:44:03,840

on twitter at skeptic zone liking us on

899

00:44:00,849 --> 00:44:06,219

facebook and leaving a review on iTunes

900

00:44:03,840 --> 00:44:08,890

you can also show your support by

901

00:44:06,219 --> 00:44:12,639

subscribing via paypal for as little as

902

00:44:08,889 --> 00:44:14,829

99 cents a week the skeptic zone is an

903

00:44:12,639 --> 00:44:16,750

independent production the views and

904

00:44:14,829 --> 00:44:18,969

opinions expressed on the skeptic zone

905

00:44:16,750 --> 00:44:21,820

are not necessarily those of Australian

906

00:44:18,969 --> 00:44:24,659

skeptic tea or any other skeptical

907

00:44:21,820 --> 00:44:24,660

organization

908

00:44:32,639 --> 00:44:37,509

hello Richard Saunders here from

909

00:44:34,809 --> 00:44:39,099

skeptics own podcast listeners might say

910

00:44:37,510 --> 00:44:42,070

well remember from time to time I

911

00:44:39,099 --> 00:44:44,139

complain about their aircraft noise when

912

00:44:42,070 --> 00:44:45,340

I'm trying to record the show well this

913

00:44:44,139 --> 00:44:47,079

morning I thought I get up nice and

914

00:44:45,340 --> 00:44:50,500

early and do in a couple of weeks and

915

00:44:47,079 --> 00:44:53,769

voiceovers for the show only to hear

916

00:44:50,500 --> 00:44:55,389

that a flock of rainbow lorikeets is

917

00:44:53,769 --> 00:44:58,800

taken up residency in the tree just

918

00:44:55,389 --> 00:44:58,799

outside the studio

919

00:45:00,989 --> 00:45:04,759

oh the joys of nature