

## Vitamin Supplements Don't Work (II)

(Cochrane Reports--2008)

---

- "no evidence to support antioxidant supplements to prevent mortality in healthy people or patients with various diseases"
- "beta carotene, vitamin A and vitamin E **significantly increased mortality**"

1  
00:00:03,669 --> 00:00:02,070  
we looked at all kinds of diseases the

2  
00:00:05,510 --> 00:00:03,679  
chinese government gave to this and

3  
00:00:08,629 --> 00:00:05,520  
measured things in blood and urine as i

4  
00:00:10,549 --> 00:00:08,639  
said we had that it was uh literally

5  
00:00:12,310 --> 00:00:10,559  
more than a hundred thousand

6  
00:00:13,990 --> 00:00:12,320  
correlation coefficients of everything

7  
00:00:15,589 --> 00:00:14,000  
being related everything else and then

8  
00:00:17,349 --> 00:00:15,599  
we were trying to sort out you know what

9  
00:00:19,029 --> 00:00:17,359  
was statistically significant not and

10  
00:00:20,950 --> 00:00:19,039  
then you take it a step further

11  
00:00:22,390 --> 00:00:20,960  
exploring these individual trees and

12  
00:00:24,550 --> 00:00:22,400  
this forest

13  
00:00:25,910 --> 00:00:24,560

in a sense and so these are just a list

14

00:00:27,670 --> 00:00:25,920

of some of the relationships that we

15

00:00:29,669 --> 00:00:27,680

looked looked at

16

00:00:31,189 --> 00:00:29,679

a little bit reductionist

17

00:00:32,950 --> 00:00:31,199

one thing at a time

18

00:00:34,069 --> 00:00:32,960

that i'm sort of criticized in a sense

19

00:00:36,389 --> 00:00:34,079

but

20

00:00:37,670 --> 00:00:36,399

i mean to understand how these these

21

00:00:39,750 --> 00:00:37,680

relationships

22

00:00:41,670 --> 00:00:39,760

really work is helpful because it it

23

00:00:43,190 --> 00:00:41,680

tends to set the mosaic

24

00:00:45,990 --> 00:00:43,200

you know what the larger picture might

25

00:00:47,910 --> 00:00:46,000

look like and so and this is basically

26  
00:00:49,990 --> 00:00:47,920  
is all published stuff so we had the

27  
00:00:53,430 --> 00:00:50,000  
advantage of you know having our peers

28  
00:00:54,389 --> 00:00:53,440  
look at in fact what we were doing um

29  
00:00:55,990 --> 00:00:54,399  
and so

30  
00:00:57,590 --> 00:00:56,000  
just a couple of observations from that

31  
00:00:59,110 --> 00:00:57,600  
i'll come back to what that means in a

32  
00:01:01,029 --> 00:00:59,120  
second

33  
00:01:03,349 --> 00:01:01,039  
it turns out that the blood questionable

34  
00:01:06,149 --> 00:01:03,359  
levels in the chinese population

35  
00:01:07,830 --> 00:01:06,159  
were really below 150 milligrams per

36  
00:01:09,350 --> 00:01:07,840  
deciliter

37  
00:01:11,270 --> 00:01:09,360  
which was sort of unheard of in those

38  
00:01:13,030 --> 00:01:11,280

days i mean their range was

39

00:01:14,469 --> 00:01:13,040

their range of averages for the

40

00:01:16,950 --> 00:01:14,479

different counties

41

00:01:18,149 --> 00:01:16,960

was from 90 to 170 their high was near

42

00:01:19,590 --> 00:01:18,159

or low

43

00:01:21,429 --> 00:01:19,600

so we're working with a population where

44

00:01:25,190 --> 00:01:21,439

cholesterol levels are really pretty low

45

00:01:27,270 --> 00:01:25,200

you know going from 970 i mean ours goes

46

00:01:29,429 --> 00:01:27,280

more or less from 150 to 300 or

47

00:01:31,429 --> 00:01:29,439

something like that but to look at any

48

00:01:33,510 --> 00:01:31,439

possible correlation going from let's

49

00:01:35,190 --> 00:01:33,520

say 90 to 150

50

00:01:36,469 --> 00:01:35,200

we saw i didn't think we would see a

51  
00:01:38,310 --> 00:01:36,479  
whole lot

52  
00:01:39,590 --> 00:01:38,320  
because in that population in rural

53  
00:01:41,190 --> 00:01:39,600  
china they're mostly consuming

54  
00:01:43,190 --> 00:01:41,200  
plant-based foods

55  
00:01:45,030 --> 00:01:43,200  
some animal-based foods of course

56  
00:01:47,830 --> 00:01:45,040  
there's a certain range

57  
00:01:49,510 --> 00:01:47,840  
so we didn't think we'd see a whole lot

58  
00:01:50,789 --> 00:01:49,520  
based on that but it was it was kind of

59  
00:01:52,870 --> 00:01:50,799  
exciting to have the opportunity of

60  
00:01:55,270 --> 00:01:52,880  
looking that at this and i'll just throw

61  
00:01:57,429 --> 00:01:55,280  
that one here out consume more calories

62  
00:02:00,789 --> 00:01:57,439  
that's worth a couple of seminars but

63  
00:02:02,550 --> 00:02:00,799

basically counting calories don't count

64

00:02:03,749 --> 00:02:02,560

you know as much as what people like to

65

00:02:05,749 --> 00:02:03,759

think they do

66

00:02:08,150 --> 00:02:05,759

it's the way we actually metabolize and

67

00:02:10,070 --> 00:02:08,160

experience the use of these calories um

68

00:02:11,270 --> 00:02:10,080

that that really matters so here's

69

00:02:14,470 --> 00:02:11,280

another

70

00:02:16,470 --> 00:02:14,480

heresy that rose from the china study

71

00:02:18,869 --> 00:02:16,480

uh i mean this is huge that i hate to

72

00:02:22,550 --> 00:02:18,879

sort of be so conscriptive you know

73

00:02:24,390 --> 00:02:22,560

on all this information but um basically

74

00:02:26,150 --> 00:02:24,400

looking at the data management different

75

00:02:27,350 --> 00:02:26,160

ways relatively small intakes of

76  
00:02:29,750 --> 00:02:27,360  
animal-based foods are associated with

77  
00:02:31,589 --> 00:02:29,760  
the secret there you have it

78  
00:02:33,830 --> 00:02:31,599  
and coming from the dairy farms i did

79  
00:02:35,270 --> 00:02:33,840  
and eating that way and all this kind of

80  
00:02:37,430 --> 00:02:35,280  
stuff you don't get into this particular

81  
00:02:38,869 --> 00:02:37,440  
point in time getting really robust

82  
00:02:40,550 --> 00:02:38,879  
evidence

83  
00:02:42,550 --> 00:02:40,560  
you know involving multiple different

84  
00:02:44,710 --> 00:02:42,560  
kinds of diseases involving the

85  
00:02:45,990 --> 00:02:44,720  
convergence you know of nutrient

86  
00:02:47,509 --> 00:02:46,000  
experiences

87  
00:02:49,030 --> 00:02:47,519  
in the form of food

88  
00:02:51,830 --> 00:02:49,040

really kind of put the story together in

89

00:02:54,710 --> 00:02:51,840

a way which was very exciting

90

00:02:56,229 --> 00:02:54,720

and so this is what the china study sort

91

00:02:58,470 --> 00:02:56,239

of showed us

92

00:03:00,070 --> 00:02:58,480

in addition to

93

00:03:02,550 --> 00:03:00,080

giving us some evidence what that

94

00:03:04,070 --> 00:03:02,560

context was all about

95

00:03:05,990 --> 00:03:04,080

the vast majority of those things i

96

00:03:07,190 --> 00:03:06,000

showed before of these hypothetical

97

00:03:10,390 --> 00:03:07,200

cause infections socially favored

98

00:03:12,390 --> 00:03:10,400

nutrient composition plant-based foods

99

00:03:14,229 --> 00:03:12,400

uh and consuming a plant-based and this

100

00:03:15,670 --> 00:03:14,239

is key here at whole foods i'm not

101  
00:03:17,830 --> 00:03:15,680  
talking about taking the nutrients out

102  
00:03:19,030 --> 00:03:17,840  
of plants and putting them in a pill

103  
00:03:21,030 --> 00:03:19,040  
they don't work

104  
00:03:22,470 --> 00:03:21,040  
nutrient supplements don't work

105  
00:03:24,149 --> 00:03:22,480  
in the long run they really don't a lot

106  
00:03:26,790 --> 00:03:24,159  
of people think yes nutrition that's

107  
00:03:30,550 --> 00:03:26,800  
pharmacology in my mind that's not not

108  
00:03:31,509 --> 00:03:30,560  
really nutrition but in any case um

109  
00:03:33,910 --> 00:03:31,519  
so

110  
00:03:36,789 --> 00:03:33,920  
less pillow protein no animal protein

111  
00:03:38,869 --> 00:03:36,799  
less okay then it's consistent i mean i

112  
00:03:40,710 --> 00:03:38,879  
i i'm general i'm really summarizing a

113  
00:03:41,589 --> 00:03:40,720

whole lot of stuff here but that's more

114

00:03:43,670 --> 00:03:41,599

sort of

115

00:03:45,509 --> 00:03:43,680

i guess the main observation that i like

116

00:03:47,030 --> 00:03:45,519

bring to your attention

117

00:03:48,390 --> 00:03:47,040

and to

118

00:03:50,149 --> 00:03:48,400

address that question concerning

119

00:03:52,229 --> 00:03:50,159

nutrient supplements for which there's

120

00:03:54,630 --> 00:03:52,239

been a multi-billion dollar industry for

121

00:03:56,390 --> 00:03:54,640

the last 20 30 years everybody takes our

122

00:03:58,789 --> 00:03:56,400

nutrient supplements in the hope of

123

00:04:01,589 --> 00:03:58,799

getting something out of it um i've

124

00:04:03,429 --> 00:04:01,599

always had the the thought that uh

125

00:04:05,350 --> 00:04:03,439

that's uh

126  
00:04:06,869 --> 00:04:05,360  
that that's questionable to even assume

127  
00:04:08,550 --> 00:04:06,879  
that in the long run they sort of

128  
00:04:10,869 --> 00:04:08,560  
violate the sense you know what nature

129  
00:04:12,630 --> 00:04:10,879  
is all about the idea that we can take a

130  
00:04:15,429 --> 00:04:12,640  
single nutrient and throw it into our

131  
00:04:16,789 --> 00:04:15,439  
body at some doses at the wrong time and

132  
00:04:18,710 --> 00:04:16,799  
expect to get the kind of results the

133  
00:04:20,629 --> 00:04:18,720  
fact that we want

134  
00:04:21,509 --> 00:04:20,639  
that we have now a lot of evidence that

135  
00:04:23,990 --> 00:04:21,519  
that's

136  
00:04:25,510 --> 00:04:24,000  
really not likely to be true and in fact

137  
00:04:27,670 --> 00:04:25,520  
just recently in the last four or five

138  
00:04:29,510 --> 00:04:27,680

years six seven years or so there's been

139

00:04:30,629 --> 00:04:29,520

actually quite a number of really good

140

00:04:32,629 --> 00:04:30,639

reviews

141

00:04:34,710 --> 00:04:32,639

of all these trials that have been done

142

00:04:37,749 --> 00:04:34,720

on sickle nutrients

143

00:04:39,590 --> 00:04:37,759

and those those robust reviews the most

144

00:04:42,310 --> 00:04:39,600

recent one involved in 58 different

145

00:04:44,310 --> 00:04:42,320

studies over the past 15 years or so are

146

00:04:46,469 --> 00:04:44,320

making conclusions they don't work i

147

00:04:47,990 --> 00:04:46,479

mean here's a couple of statements here

148

00:04:49,590 --> 00:04:48,000

no evidence to support antioxidant

149

00:04:51,430 --> 00:04:49,600

supplements prevent mortality you can

150

00:04:53,430 --> 00:04:51,440

see it for yourself beta-carotene

151  
00:04:56,390 --> 00:04:53,440  
vitamin a vitamin and now we can add

152  
00:04:58,629 --> 00:04:56,400  
some more like omega-3s

153  
00:05:00,790 --> 00:04:58,639  
recent studies are showing this too that

154  
00:05:02,390 --> 00:05:00,800  
those kinds of supplements that people

155  
00:05:03,909 --> 00:05:02,400  
like to think are nutrients they're sort

156  
00:05:05,990 --> 00:05:03,919  
of the magic tricks that people think

157  
00:05:07,830 --> 00:05:06,000  
they're going to want to use

158  
00:05:08,790 --> 00:05:07,840  
they're not working they actually can

159  
00:05:10,790 --> 00:05:08,800  
increase

160  
00:05:13,510 --> 00:05:10,800  
significantly some of these diseases and

161  
00:05:15,510 --> 00:05:13,520  
perhaps you know total mortality even

162  
00:05:17,430 --> 00:05:15,520  
so i want i'll just point this out

163  
00:05:18,790 --> 00:05:17,440

because what i'm talking about is whole

164

00:05:20,150 --> 00:05:18,800

foods

165

00:05:22,790 --> 00:05:20,160

you know not not the individual

166

00:05:24,390 --> 00:05:22,800

nutrients along the way and so now it

167

00:05:27,350 --> 00:05:24,400

raises some new questions and when i got

168

00:05:28,870 --> 00:05:27,360

together with my son who at the time was

169

00:05:31,510 --> 00:05:28,880

a graduate in theater he was an actor in

170

00:05:33,350 --> 00:05:31,520

chicago good good writer got him to help

171

00:05:34,710 --> 00:05:33,360

me to write uh he's now in medical

172

00:05:36,310 --> 00:05:34,720

school by the way i had to give him

173

00:05:38,629 --> 00:05:36,320

credit

174

00:05:39,909 --> 00:05:38,639

he's a co-author when we sit down to do

175

00:05:41,270 --> 00:05:39,919

the book

176

00:05:42,790 --> 00:05:41,280

uh i wanted to go back and

177

00:05:44,870 --> 00:05:42,800

systematically look at some things that

178

00:05:46,710 --> 00:05:44,880

i had kind of paid attention to over the

179

00:05:48,550 --> 00:05:46,720

years but look a little more seriously

180

00:05:49,749 --> 00:05:48,560

and i was asked this question how is

181

00:05:50,950 --> 00:05:49,759

this information that we're learning

182

00:05:52,550 --> 00:05:50,960

from the gender studies learning from

183

00:05:54,870 --> 00:05:52,560

the experimental studies how is this

184

00:05:56,710 --> 00:05:54,880

information

185

00:05:58,870 --> 00:05:56,720

uh related to let's say findings of

186

00:06:01,990 --> 00:05:58,880

others and colleagues maybe that haven't

187

00:06:03,510 --> 00:06:02,000

been having been noticed and uh

188

00:06:05,670 --> 00:06:03,520

here's one gentleman here called

189

00:06:06,790 --> 00:06:05,680

esselstyn at the cleveland clinic nell a

190

00:06:08,550 --> 00:06:06,800

good friend

191

00:06:10,710 --> 00:06:08,560

a very distinguished surgeon from many

192

00:06:12,230 --> 00:06:10,720

years cleveland clinton he he he's got

193

00:06:14,550 --> 00:06:12,240

as much distinction professionally and

194

00:06:16,309 --> 00:06:14,560

personally as probably any anyone in in

195

00:06:18,710 --> 00:06:16,319

the field by far

196

00:06:21,189 --> 00:06:18,720

any case he did a study here where just

197

00:06:22,309 --> 00:06:21,199

very briefly i'm going to say it took 18

198

00:06:24,230 --> 00:06:22,319

patients

199

00:06:26,390 --> 00:06:24,240

with heart disease

200

00:06:29,430 --> 00:06:26,400

seriously it was heart disease

201  
00:06:30,870 --> 00:06:29,440  
these were these are 8 17 men one woman

202  
00:06:32,550 --> 00:06:30,880  
these are people who have been told by

203  
00:06:34,629 --> 00:06:32,560  
the physician time's up

204  
00:06:37,909 --> 00:06:34,639  
we can't do anything more for you

205  
00:06:39,510 --> 00:06:37,919  
very sick very advanced they had had 49

206  
00:06:42,230 --> 00:06:39,520  
cardiovascular during eight years prior

207  
00:06:46,550 --> 00:06:43,590  
eight you know

208  
00:06:48,469 --> 00:06:46,560  
49 that's about three apiece

209  
00:06:49,670 --> 00:06:48,479  
they went from that after he put him on

210  
00:06:51,430 --> 00:06:49,680  
the same kind of diet that we're

211  
00:06:52,790 --> 00:06:51,440  
learning about in the china study

212  
00:06:54,629 --> 00:06:52,800  
we didn't know each other at the time

213  
00:06:56,150 --> 00:06:54,639

this is this is his game

214

00:06:58,070 --> 00:06:56,160

uh and he was doing this for other

215

00:07:00,629 --> 00:06:58,080

reasons and the results that he got in

216

00:07:02,469 --> 00:07:00,639

fact was that he went from 49 to zero

217

00:07:04,550 --> 00:07:02,479

during 12 years of following

218

00:07:07,270 --> 00:07:04,560

and now it's actually in exercise of 20.

219

00:07:09,189 --> 00:07:07,280

sometimes 23 years one person in that

220

00:07:13,029 --> 00:07:09,199

group there's three have died

221

00:07:17,510 --> 00:07:15,270

one did have a coronary vent but that

222

00:07:18,629 --> 00:07:17,520

person that that man actually strayed a

223

00:07:20,150 --> 00:07:18,639

bit from the

224

00:07:21,589 --> 00:07:20,160

from the idea

225

00:07:23,350 --> 00:07:21,599

and so it's sort of proof of the pudding

226

00:07:26,629 --> 00:07:23,360

in a sense he came back and everything

227

00:07:28,390 --> 00:07:26,639

was fine so uh i mean

228

00:07:30,390 --> 00:07:28,400

you can see for yourself here i mean

229

00:07:32,790 --> 00:07:30,400

going from

230

00:07:35,189 --> 00:07:32,800

those 49 countermeasures zero

231

00:07:36,710 --> 00:07:35,199

it's a drug companies had had 10 of that

232

00:07:39,830 --> 00:07:36,720

effect we'd all heard about in the

233

00:07:44,150 --> 00:07:42,070

why is this

234

00:07:46,150 --> 00:07:44,160

you know not not not considered more and

235

00:07:47,589 --> 00:07:46,160

incidentally this is the same thing what

236

00:07:49,830 --> 00:07:47,599

we are learning from the scientific and

237

00:07:52,950 --> 00:07:49,840

theoretical point of views is for in our

238

00:07:54,710 --> 00:07:52,960

own studies um and so i could go i've

239

00:07:56,869 --> 00:07:54,720

got a bunch of slides you know going to

240

00:07:59,189 --> 00:07:56,879

multiple sclerosis and rheumatoid

241

00:08:01,430 --> 00:07:59,199

arthritis and osteoporosis and different

242

00:08:04,230 --> 00:08:01,440

kinds of cancers we have data now that

243

00:08:05,909 --> 00:08:04,240

really is all just spectacular like this

244

00:08:08,070 --> 00:08:05,919

and so here's just a list

245

00:08:10,629 --> 00:08:08,080

here's a list of some things all these

246

00:08:12,150 --> 00:08:10,639

diseases as far as the diet is concerned

247

00:08:13,909 --> 00:08:12,160

we're talking about whole plant-based

248

00:08:17,110 --> 00:08:13,919

foods

249

00:08:20,710 --> 00:08:17,120

the same diet whole food plant-based

250

00:08:23,510 --> 00:08:20,720

prevents suspense and here's the kicker

251

00:08:25,350 --> 00:08:23,520

cures all these diseases

252

00:08:26,869 --> 00:08:25,360

it's truly amazing i they'll have a

253

00:08:28,390 --> 00:08:26,879

chance to get into that what do you

254

00:08:30,550 --> 00:08:28,400

think of this diet as a means of

255

00:08:31,909 --> 00:08:30,560

preventing these diseases

256

00:08:32,870 --> 00:08:31,919

we now

257

00:08:34,550 --> 00:08:32,880

know

258

00:08:36,709 --> 00:08:34,560

and look at the literature

259

00:08:38,389 --> 00:08:36,719

that it has this very broad effect of

260

00:08:39,589 --> 00:08:38,399

all kinds of on all kinds of illnesses

261

00:08:42,070 --> 00:08:39,599

diseases

262

00:08:45,030 --> 00:08:42,080

and actually when used even in fairly

263

00:08:47,990 --> 00:08:45,040

advanced stages we can see results

264

00:08:49,910 --> 00:08:48,000

just almost immediately

265

00:08:51,590 --> 00:08:49,920

to see reversal type 2 diabetes for

266

00:08:52,949 --> 00:08:51,600

example i have a physician friend in

267

00:08:55,750 --> 00:08:52,959

california

268

00:08:57,350 --> 00:08:55,760

who takes in uh type 2 diabetics

269

00:08:58,550 --> 00:08:57,360

very sick

270

00:09:00,470 --> 00:08:58,560

when they come in

271

00:09:02,389 --> 00:09:00,480

puts them through a 10-day period he

272

00:09:03,509 --> 00:09:02,399

says give me all your meds

273

00:09:05,030 --> 00:09:03,519

he gets them and sticks them in a

274

00:09:06,310 --> 00:09:05,040

cabinet locks the keys they're not going

275

00:09:08,150 --> 00:09:06,320

to happen

276

00:09:09,910 --> 00:09:08,160

because when he puts them on this diet

277

00:09:11,190 --> 00:09:09,920

their their need for insulin goes down

278

00:09:13,190 --> 00:09:11,200

so fast

279

00:09:15,670 --> 00:09:13,200

that were they to stay on the insulin

280

00:09:16,710 --> 00:09:15,680

medications they'd go into hypoglycemic

281

00:09:18,710 --> 00:09:16,720

shock

282

00:09:22,630 --> 00:09:18,720

that's how potent it really is

283

00:09:23,910 --> 00:09:22,640

um and so this is just a list of

284

00:09:25,430 --> 00:09:23,920

some of these

285

00:09:27,350 --> 00:09:25,440

diseases obviously some of them very

286

00:09:29,910 --> 00:09:27,360

serious other sort of nuisance kind of

287

00:09:32,470 --> 00:09:30,870

i mean it's

288

00:09:33,269 --> 00:09:32,480

well i don't need to say more i don't

289

00:09:34,389 --> 00:09:33,279

think

290

00:09:37,350 --> 00:09:34,399

um

291

00:09:40,070 --> 00:09:37,360

it also promotes physical fitness

292

00:09:42,790 --> 00:09:40,080

i that might seem a bit odd but i've

293

00:09:44,949 --> 00:09:42,800

worked with some world-class athletes

294

00:09:46,310 --> 00:09:44,959

including one fellow who is the all-pro

295

00:09:48,230 --> 00:09:46,320

and for the kansas city chiefs is going

296

00:09:50,150 --> 00:09:48,240

to be in the hall of fame he's he holds

297

00:09:52,550 --> 00:09:50,160

the all-time record most touchdowns most

298

00:09:54,230 --> 00:09:52,560

large game i mean he a couple years i

299

00:09:56,389 --> 00:09:54,240

got the book because he was saw somebody

300

00:09:58,710 --> 00:09:56,399

on the plane using it he decided to

