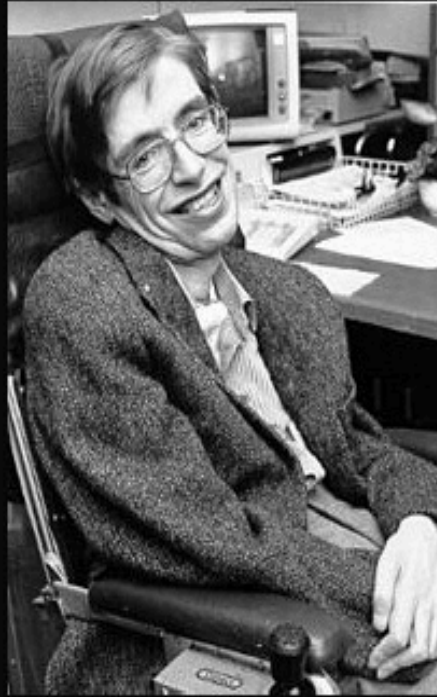


Dr Aseem Malhotra, Honorary Consultant Cardiologist, Lister Hospital  
Stevenage  
Academy of Medical Royal Colleges Choosing Wisely Steering Group  
King's Fund – Member of Board of Trustees

Special thanks to Professor Sir Muir Gray, Professor Robert Lustig, Professor  
Simon Capewell, Kevin Hall PhD, Dr David Unwin

# THE SCIENCE OF REVERSING TYPE 2 DIABETES WITH A LOW CARBOHYDRATE DIET (AND OVERCOMING OPPOSITION FROM VESTED INTERESTS)



The greatest enemy of knowledge is not ignorance,  
it is the illusion of knowledge.

(Stephen Hawking)

# The Evidence-Based Medicine triad

(see D.L. Sackett et al, BMJ 1996; 312: 71-72)



- ◎ “ Half of what you learn in medical school will be shown to be either dead wrong or out of date within 5 years of your graduation; the trouble is nobody can tell you which half. The most important thing to learn is how to learn on your own” David Sackett



# Efficient Health Care Requires Informed Doctors and Patients

## Seven Sins that contribute to Lack of knowledge

- ⦿ Biased funding of research (research funded because it is likely to be profitable, not because it is likely to be beneficial for patients)
- ⦿ Biased reporting in medical journals
- ⦿ Biased patient pamphlets
- ⦿ Biased reporting in the media
- ⦿ Commercial Conflicts of interest
- ⦿ Defensive medicine
- ⦿ Medical curricula that fail to teach doctors how to comprehend and communicate health statistics.

Ref: G. Gigerenzer, J.A Muir Gray. Better Doctors, Better Patients, Better Decisions, Envisioning Healthcare 2020,



# UK: The fat man of Europe?

- 2/3 adults obese or overweight
- obesity will double by 2050
- 1/3 children obese or overweight
- Obesity costs NHS £5billion+
- ↑ ↑£10 billion by 2050

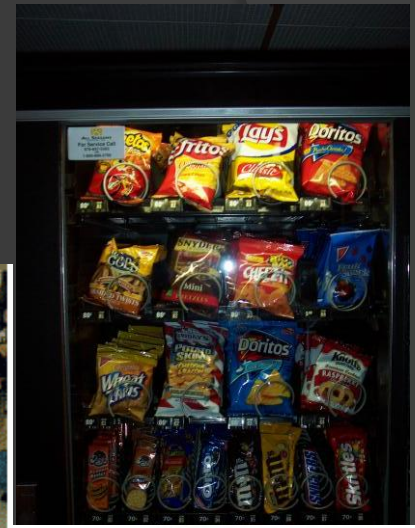




# Snack Foods Are Everywhere



- Car washes
- Book stores
- Hardware stores
- Gas stations
- Office buildings (vending machines)
- Health clubs/gyms
- Video stores
- Car repair shops







**Guys Hospital  
St Thomas Street**



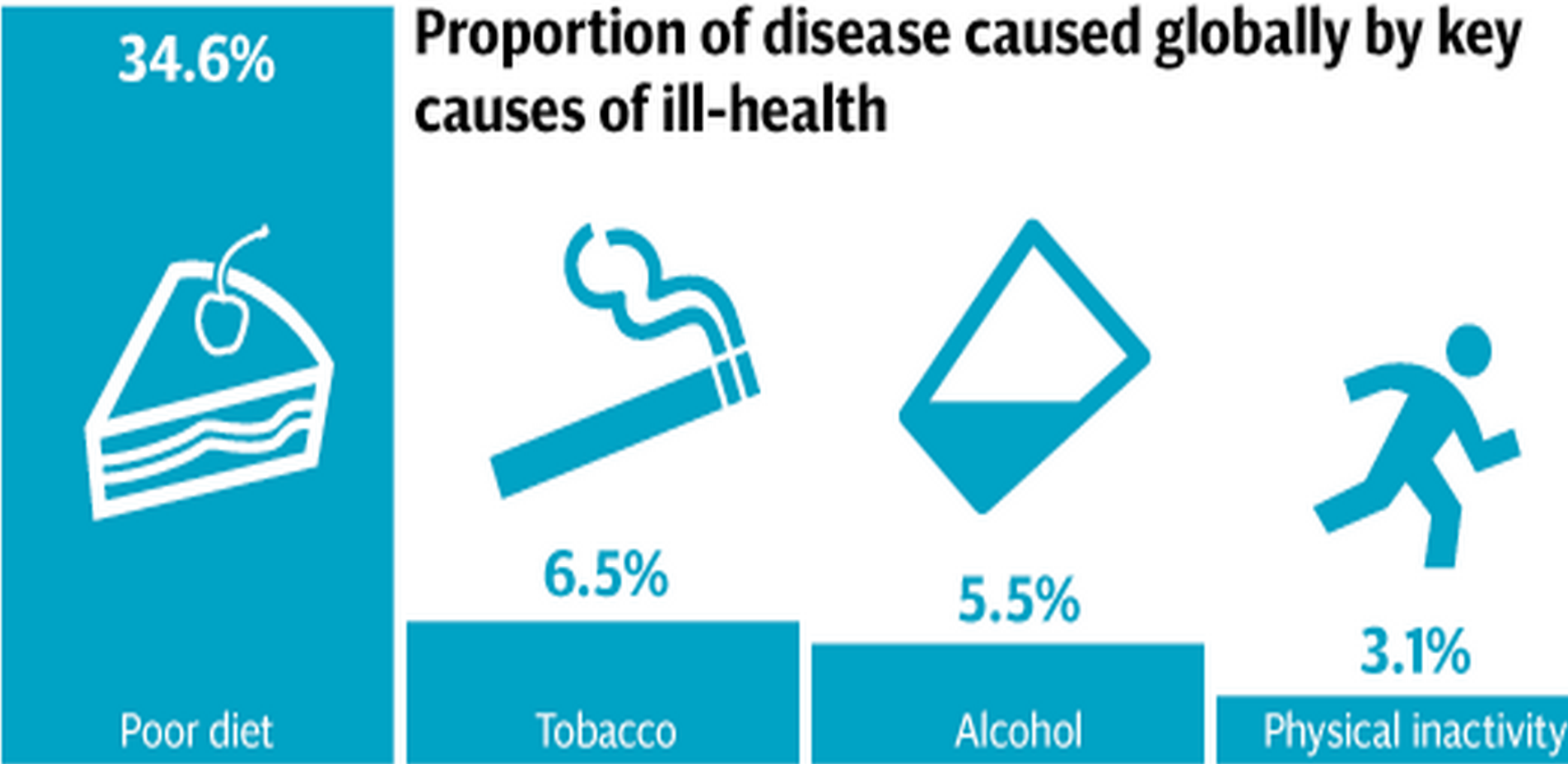
**200 yards**

# Burden of disease attributable to 20 leading risk factors in 2010

expressed as a percentage of global disability-adjusted life-years

Global Burden of Disease Group. [www.thelancet.com](http://www.thelancet.com) 2012 380 2245

<http://www.telegraph.co.uk/news/health/news/11556593/Sugar-is-to-blame-for-obesity-epidemic-not-couch-potato-habits.html>



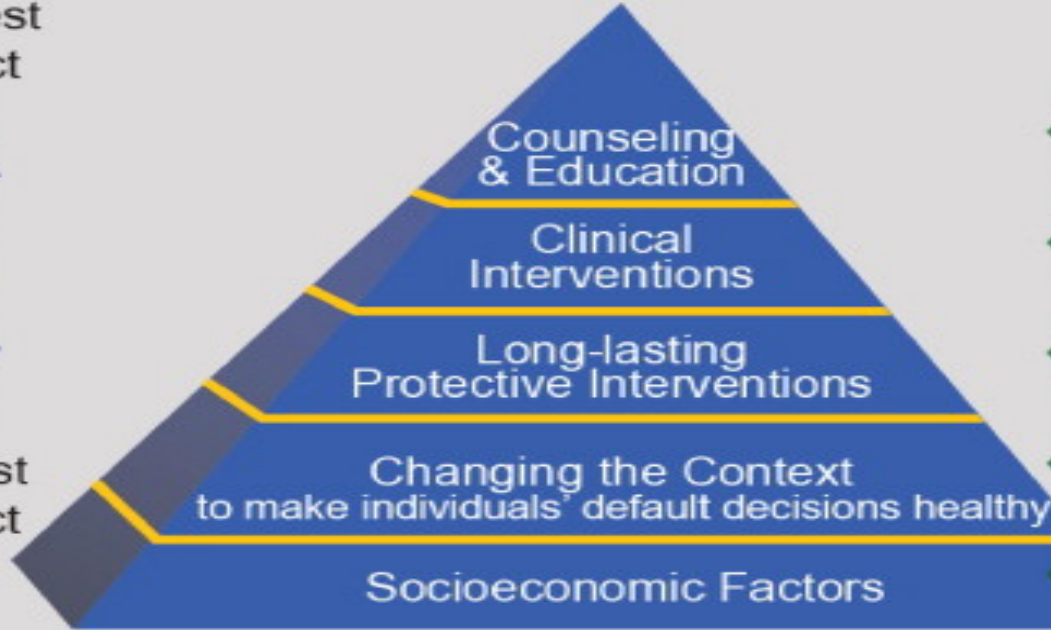
Source: Prof Simon Capewell, Professor of Clinical Epidemiology, University of Liverpool, analysis of Lancet global burden of disease report

# CDC Health Impact Pyramid

Smallest  
Impact



Largest  
Impact



## Examples

Eat healthy, be physically active

Rx for high blood pressure, high cholesterol, diabetes

Immunizations, brief intervention, cessation treatment, colonoscopy

Fluoridation, 0g trans fat, iodization, smoke-free laws, tobacco tax

Poverty, education, housing, inequality



***Tom Frieden's health impact pyramid***

# EFFECTIVENESS HEIRARCHY -----)

“**Downstream**” preventive activities **targeting individuals**

*(eg 1:1 personal advice, health education, “nudge”)*

consistently achieve a smaller public health impact than interventions aimed further  
“**upstream**”

*(eg smokefree laws, alcohol pricing or transfats regulations).*

These **policy-based interventions** tend to be more effective, potentially reaching all parts of the population and not being dependent on a sustained individual response

# Criteria for Type 2 Diabetes Remission



- Previous diagnosis of type 2 diabetes by WHO criteria.
- HbA<sub>1c</sub> <6.5% (<48 mmol/mol) after at least 2 months without antidiabetes medication.
- Confirmed by two non-diabetic test results, at least 2 months apart then reviewed annually.

**R Taylor. Beating type 2 diabetes into remission BMJ Sept 2017** BMJ 2017; 358 doi: <https://doi.org/10.1136/bmj.j4030> (Published 13 September 2017)



# LOW CARB PROGRAM

- **Objective:** To provide the education, resources and support to manage and reverse the effects of type 2 diabetes, prediabetes and metabolic syndrome
- **11-week** behaviour change program with **lifetime maintenance** support
  - Developed with the feedback of **20,000 people** with diabetes
  - Optimised with the feedback of **100,000 people** using the platform
  - AI-led data-driven architecture
- **285,000 members** from **190 countries**
- Impact recognised by international media
- Available at [LowCarbProgram.com](http://LowCarbProgram.com)



BBC

The Telegraph

theguardian

THE IRISH TIMES

Daily Mail



## LOW CARB PROGRAM OUTCOMES

Clinically validated, peer-reviewed outcomes

71% engagement at 1-year (n=1,000)



7.4kg

average weight loss



1.2%

HbA1c reduction  
(13 mmol/mol)



39%

reduce their HbA1c below  
type 2 diabetes threshold



40%

eliminate one or  
more medications



60%

of people are able to  
eliminate insulin



28%

place their type 2  
diabetes into remission

Saslow LR, Summers C, Aikens JE, Unwin DJ Outcomes of a Digitally Delivered Low-Carbohydrate Type 2 Diabetes Self-Management Program: 1-Year Results of a Single-Arm Longitudinal Study, *JMIR Diabetes*. doi:10.2196/diabetes.9333



## Virta's Clinical Trial of Continuous Remote Care & Low Carbohydrate Nutritional Guidance Reverses Type 2 Diabetes at 1 Yr

**60%**  
of patients

reverse diabetes

Glycemic Control without  
use of diabetes-specific  
medications, n=262



Blood Glucose Improvement  
1.3% average HbA1c reduction



Medication Reduction  
94% of insulin users reduced or eliminated  
usage



Resolution of Dyslipidemia  
24% decrease in triglycerides, 18% rise in  
HDL-C



Weight Loss  
12% average weight loss (14 kg)

Hallberg SJ, et al. Diabetes Therapy. 2018.






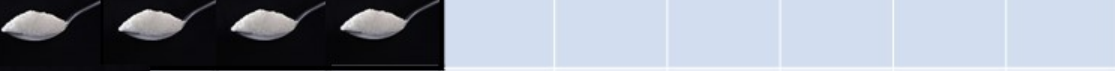


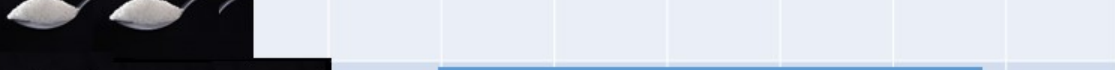
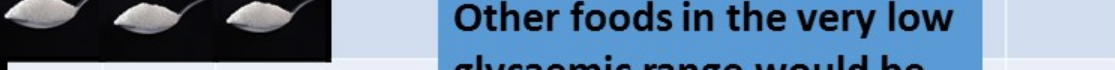
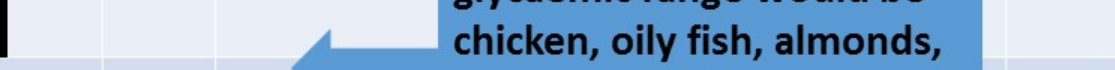



Case series of 120 T2D patients helped by a lower carb diet  
 In a primary care setting over an average of 21.2 months @lowcarbGP


# It's not just about Type 2 Diabetes Dec 18

Significant improvements in weight, liver function, lipids and blood pressure.

HbA1c in mmol/mol				Total Cholesterol			HDL Cholesterol			Cholesterol Ratio			Triglyceride		
Averages	Start	Finish	Loss	Start	Finish	Loss	Start	Finish	Loss	Start	Finish	Loss	Start	Finish	Loss
	71.0	49.5	<b>21.7</b>	4.9	4.4	<b>0.5</b>	1.2	1.3	<b>-0.1</b>	4.0	3.5	<b>0.5</b>	2.5	1.6	<b>0.9</b>
T2D remission rate currently at about 47%				Weight in Kg			Systolic BP in mmHg			Diastolic BP in mmHg			Gamma-G.T Level in U/L		
				Start	Finish	Loss	Start	Finish	Loss	Start	Finish	Loss	Start	Finish	Loss
	98.2	89.6	<b>8.6</b>	143	132	<b>11</b>	84	78	<b>6</b>	73	40	<b>33</b>			

Food Item	Glycaemic index	Serve size g	How does each food affect blood glucose compared with one 4g teaspoon of table sugar? (Represents glycaemic load) 
Basmati rice	69	150	10.1 
Potato, white, boiled	96	150	9.1 
French Fries baked	64	150	7.5 
Spaghetti White boiled	39	180	6.6 
Sweet corn boiled	60	80	4.0 
Frozen peas, boiled	51	80	1.3 
Banana	62	120	5.7 
Apple	39	120	2.3 
Wholemeal Small slice	74	30	3.0 
Broccoli	15	80	0.2 
Eggs	0	60	0 

Other foods in the very low glycaemic range would be chicken, oily fish, almonds, mushrooms, cheese





# Low carb –it's not just about diabetes



**Est. Time:** 30 minutes  
**Author:** David John Urwin  
**Curriculum Field:** 3.17 – care of people with metabolic problems

### Description

Type 2 diabetes is a common disease. Many patients remain poorly controlled despite multiple drug treatments. This module describes the use of a low glycaemic-index (GI) diet as an adjunct treatment for diabetes, using as a case study a real-life patient registered at the practice where the author is a GP Partner. The physiology and evidence behind a low glycaemic-index diet are described, as well as how to implement it in real life. The course will also address potential concerns about a low GI diet, and refer to the appropriate NICE guidelines – SIGN guidelines can be found in the resources section.



### Learning Objectives

After completing this session, you will be able to:

- explain the basics of glucose metabolism to your patients
- understand the growing evidence for a low GI diet



# **Effects of low-carbohydrate- compared with low-fat-diet interventions on metabolic control in people with type 2 diabetes: a systematic review including GRADE assessments.**

van Zuuren EJ, et al. Am J Clin Nutr. 2018.

[Show full citation](#)

## **Abstract**

**Background:** It remains uncertain which diet is best for people with type 2 diabetes (T2D).

**Objective:** We compared the effects of dietary carbohydrate restriction with fat restriction on markers of metabolic syndrome and quality of life in people with T2D.

**Conclusions:** Currently available data provide low- to moderate-certainty evidence that dietary carbohydrate restriction to a maximum of 40% yields slightly better metabolic control of uncertain clinical importance than reduction in fat to a maximum of 30% in people with T2D.

This systematic review is registered at [http://www.crd.york.ac.uk/PROSPERO/display\\_rID=CRD42017052467](http://www.crd.york.ac.uk/PROSPERO/display_rID=CRD42017052467) as CRD42017052467.

PMID: 30007275 [ - in process]

# Modern Management – Digital lifestyle intervention

Research from Liva Healthcare, one of the digital health platforms currently being used in the Healthier You: NHS Diabetes Prevention Programme, reveals a strong preference from Type 2 diabetic patients to manage their condition without medication



## Healthcare professionals

**53%** would prefer to help patients lose weight or get fit than prescribe medicine

**44%** think lifestyle changes can be as effective as medicine



## Patients

**42%** would prefer combination of medication and lifestyle change

**39%** would choose lifestyle changes to diet and exercise

**15%** would stick with medicine

Research based on a survey undertaken between 19<sup>th</sup> – 24<sup>th</sup> October of 100 healthcare professionals that deal with Type 2 diabetes and 2,000 individuals with Type 2 diabetes.

Support us →

# The Guardian

News

Opinion

Sport

Culture

Lifestyle



**Blow to low carb diet as landmark study finds high fibre cuts heart disease risk**



The review found that we should be eating at least 25g to 29g of fibre a day, with indications that over 30g is even better. Most people in the world manage less than 20g.

Among those who ate the most fibre, the analysis found a 15-30% reduction in deaths from all causes, as well as those related to the heart, compared with those eating the least fibre.

Coronary heart disease, stroke, type 2 diabetes and colorectal cancer were reduced by 16-24%. The results mean 13 fewer deaths and six fewer cases of coronary heart disease for every 1,000 people who eat high-fibre foods compared with those who do not.



Prof Jim Mann Photo: Billy Wong/University of Auckland

“Fibre-rich whole foods that require chewing and retain much of their structure in the gut increase satiety and help weight control and can favourably influence lipid and glucose levels,” said Mann.

It was very difficult to have high levels of fibre on a low-carbohydrate diet unless you took fibre supplements, said Mann. And “there isn’t the huge body of evidence that we’re talking about” for supplements being beneficial, he said, adding that “it’s pretty well impossible” to get enough fibre from fruit and vegetables alone.



**BBC News**

3 hrs · 🌐



The next time someone starts getting preachy about eating less carbs, show them this. 😏



**BBC NEWS**



BBC.COM

**The lifesaving food 90% aren't eating enough of**

# BMJ Open Assessing the nutrient intake of a low-carbohydrate, high-fat (LCHF) diet: a hypothetical case study design

Caryn Zinn,<sup>1</sup> Amy Rush,<sup>2</sup> Rebecca Johnson<sup>2</sup>

## Open Access



Table 2 LCHF sample meal plans

LCHF meal plan 1 (females)	LCHF meal plan 1 (females) (saturated fat <10% TE)	LCHF meal plan 2 (males)	LCHF meal plan 2 (males) (saturated fat <10% TE)
<b>Breakfast</b> ¾ cup frozen mixed berries, 150g plain, unsweetened, full-fat yoghurt, 2 T each sunflower and pumpkin seeds, 3 macadamia nuts, 2 Brazil nuts, 6 almonds	<b>Breakfast</b> ¾ cup frozen mixed berries, 150g plain, unsweetened low-fat yoghurt, 2 T each sunflower and pumpkin seeds, 3 macadamia nuts, 2 Brazil nuts, 6 almonds	<b>Breakfast</b> Omelette: 3 eggs, 60g mushrooms, 100g tomato, 1 cup baby spinach, cooked in 2 tsp butter	<b>Breakfast</b> Omelette: 3 eggs, 60g mushrooms, 100g tomato, 1 cup baby spinach, cooked in 3 tsp olive oil
<b>Lunch</b> Tuna salad: 95g tin tuna, canned in brine (drained), 1 cup baby spinach leaves, 60g English cucumber, 5 cherry tomatoes, 30g cheddar cheese, 2 T linseeds, 1 tsp basil pesto, 3 tsp olive oil	<b>Lunch</b> Tuna salad: 95g tin tuna, canned in brine (drained), 1 cup baby spinach leaves, 60g English cucumber, 5 cherry tomatoes, 30g low fat cottage cheese, 2 T linseeds, 10 green olives, 5 tsp avocado oil	<b>Lunch</b> Beef salad: 120g eye fillet, 1 cup spinach leaves, half red capsicum, 60g English cucumber, 5 cherry tomatoes, half large avocado, 5 walnuts, 1 T linseeds, 30g parmesan cheese, 2 T olive oil	<b>Lunch</b> Beef salad: 150g eye fillet, 1 cup spinach leaves, half red capsicum, 60g English cucumber, 5 cherry tomatoes, half large avocado, 3 T sunflower seeds, 12 green olives, 30g low fat cottage cheese, 2 T olive oil, 2 tsp avocado oil
<b>Dinner</b> 150g sirloin steak, fat not trimmed, grilled, roasted vegetables: 8 florets cauliflower, 1 medium-sized beetroot, 1 medium courgette, 1 medium carrot, coated in 2 T olive oil	<b>Dinner</b> 150g beef eye fillet, grilled, roasted vegetables: 8 florets cauliflower, 1 medium-sized beetroot, 1 medium courgette, 1 medium carrot, coated in 2 T olive oil	<b>Dinner</b> 130g grilled salmon, 100g green beans, 150g broccoli, 200g grilled pumpkin, half cup peas, 1 T olive oil	<b>Dinner</b> 150g grilled salmon, 100g green beans, 150g broccoli, 200g grilled pumpkin, half cup peas, 1 T olive oil
<b>Snacks</b> 10 medium strawberries 3 T pistachio nuts Coffee made with 200mL full-fat milk	<b>Snacks</b> 10 medium strawberries 3 T pistachio nuts Smoothie made with 200mL low fat plain, unsweetened yoghurt Coffee made with 200mL low-fat milk	<b>Snacks</b> 20 macadamia nuts Smoothie made with 200mL full-fat milk, 10 medium strawberries, crushed nuts (20g almonds, 2 T linseeds)	<b>Snacks</b> 20 macadamia nuts Smoothie made with 200mL low-fat milk, 10 medium strawberries, crushed nuts (20g almonds, 2 T linseeds), 100g low-fat plain, unsweetened yoghurt

LCHF, low-carbohydrate, high-fat diet; TE, total energy; T, tablespoon; tsp, teaspoon.



## Open Access

Table 3 Nutrient analysis of LCHF meal plans

Nutrient	Female meal plans			Male meal plans		
	Meal plan 1	Meal plan 1 (saturated fat<10% TE)	NRV/goal	Meal plan 2	Meal plan 2 (saturated fat<10% TE)	NRV/goal
Energy (calories)	2145	2053	2203	2675	2758	2820
Carbohydrate (g)	61	67	248-358	66	69	303-439
% TE	11	13	45-65	10	10	45-65
Protein (g)	115	135	83-138	149	164	106-176
% TE	22	26	15-25	22	24	15-25
Fat (g)	153	129	49-86	194	195	63-110
% TE	63	57	20-35	65	64	20-35
Saturated fat (g)	40	21	24	46	33	31
% TE	28	9.6	10	15	10.6	10
Trans fats (g)	2.2	0.7	<2.4	1.4	0.8	<3g
% TE	0.9	0.3	<1%*	0.4	0.3	<1%*
MUFA (g)	75	71	-	101	117	-
% total fat	53	59	-	65	65	-
PUFA (g)	27	28	-	32	31	-
% total fat	19	23	-	18	17	-
Linoleic acid (O6 PUFA) (g)	20.4	18.6	8†	19.1	18.5	13†
Alpha-linoleic acid (omega-3 PUFA) (g)	5.8	5.5	0.8†	6.2	6.2	1.3†
Omega-6:omega-3 ratio	3.5	3.4	10	2.1	3.0	10
Fibre (g)	38	39	25†	45	44	30†
Thiamin (mg)	1.4	1.4	1.1	1.6	1.8	1.2
Riboflavin (mg)	2.4	2.4	1.1	3.3	3.5	1.3
Niacin (mg)	23.4	18.8	14	16.2	17.5	16
Vitamin C (mg)	371	370	45	394	398	45
Vitamin A (µg)	2247	2095	700	2374	2047	900
Vitamin E (mg)	23	22	7†	32	41	10†
Vitamin B <sub>12</sub> (µg)	3.9	6.4	2.4	11.6	12.8	2.4
Folate, total (µg)	568	583	400	788	757	400
Calcium (mg)	1093	1224	1000	1216	1251	1000
Iron (mg)	16	16	18	20	21	8
Magnesium (mg)	553	589	310-320	582	598	400-420
Zinc (mg)	16	22	8	23	24	14
Sodium (mg)	2183	2250	460†	1554	2032	460†
Potassium (mg)	4639	5154	2800†	5585	6107	3800†
Phosphorous (mg)	1848	2076	1000	2478	2644	1000
Selenium (µg)	166	169	60	113	117	70
Iodine (µg)	225	190	150	223	207	150

\*WHO recommendation for trans fats.

†AIs were used as RDIs were unavailable.

AI, adequate intake; LCHF, low-carbohydrate, high-fat diet; MUFA, monounsaturated fat; NRV, nutrient reference value; PUFA, polyunsaturated fat; RDI, recommended daily intake; TE, total energy.

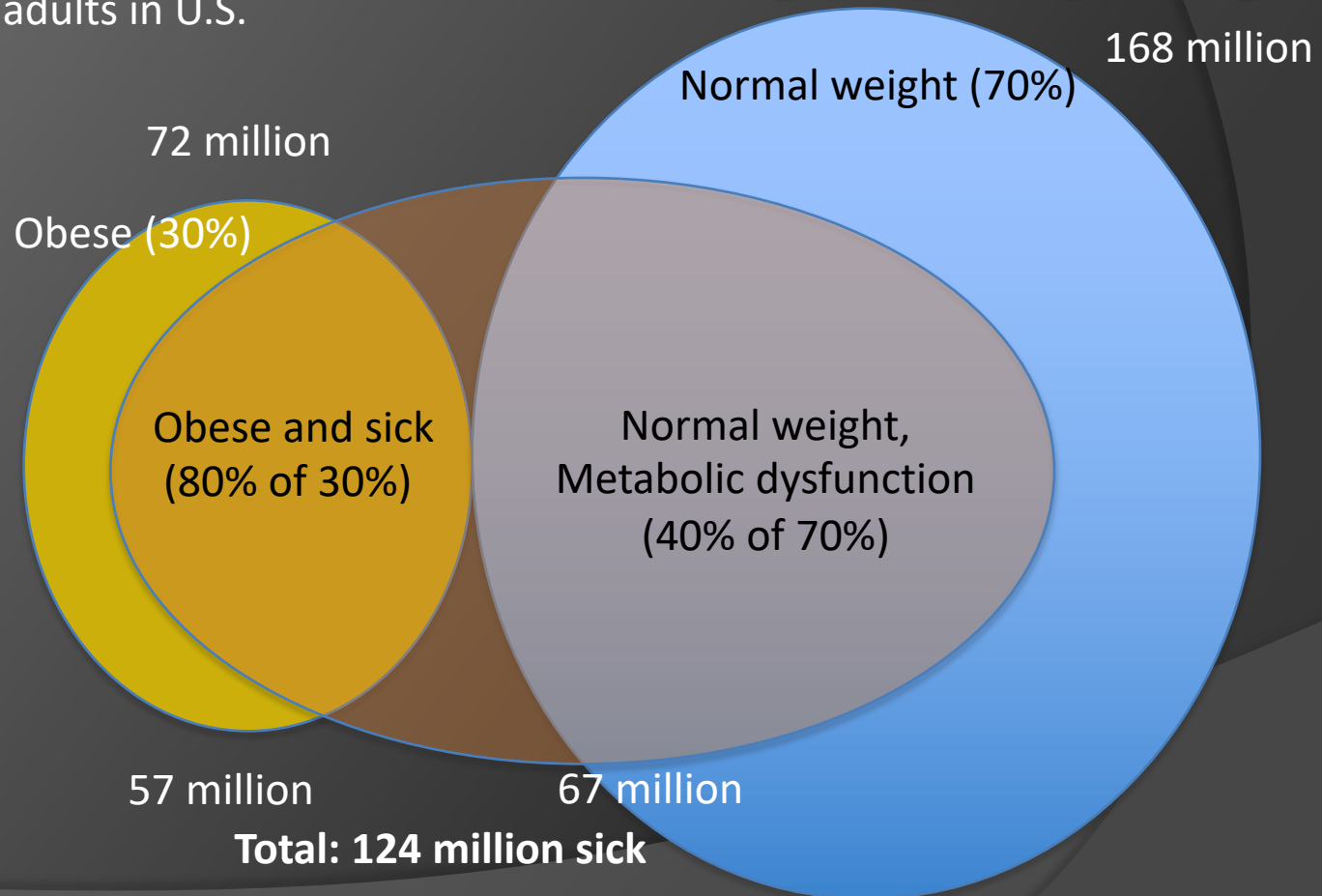
# Fibre on low carb diet

- ① “ We also demonstrate that the Ais for fibre are surpassed in all of these meal plans, and while devoid of wholegrains, fibre, both soluble and insoluble can be easily derived from fruit, vegetables, nuts and seeds”



# “INCLUSIVE” VIEW OF OBESITY AND METABOLIC DYSFUNCTION

240 million adults in U.S.



# Overfat Adults and Children in Developed Countries: The Public Health Importance of Identifying Excess Body Fat

*Philip B. Maffetone<sup>1\*</sup>, Ivan Rivera-Dominguez<sup>2</sup> and Paul B. Laursen<sup>3</sup>*

*<sup>1</sup>Independent Researcher, Oracle, AZ, United States, <sup>2</sup>Research Assistant, San Diego, CA, United States, <sup>3</sup>Sports Performance Research Institute New Zealand (SPRINZ), Auckland University of Technology, Auckland, New Zealand*

The global overfat pandemic is a serious public health crisis that places a substantial burden on economic resources in developed countries. The term *overfat* refers to the presence of excess body fat that can impair health, even for normal weight non-obese individuals. Excess body fat is associated with cardiometabolic dysfunction, a clinical situation that can progressively worsen, potentially leading to various common disease risk factors, chronic diseases, increased morbidity and mortality, and reduced quality of life. The prevalence of overfat populations in 30 of the world's most developed countries is substantially higher than recent global estimations, with the largest growth due to a relatively recent increased number of people with excess abdominal fat. Abdominal overfat is the most unhealthful form of this condition, so it is concerning that average waist circumference measures, generally indicative of abdominal overfat, have increased. Despite a leveling off appearance of being overweight and/or obese in some developed countries, the overfat pandemic continues to grow.

**Keywords:** obesity, abdominal obesity, overweight, chronic disease, inflammation, insulin resistance

## KEY FINDINGS

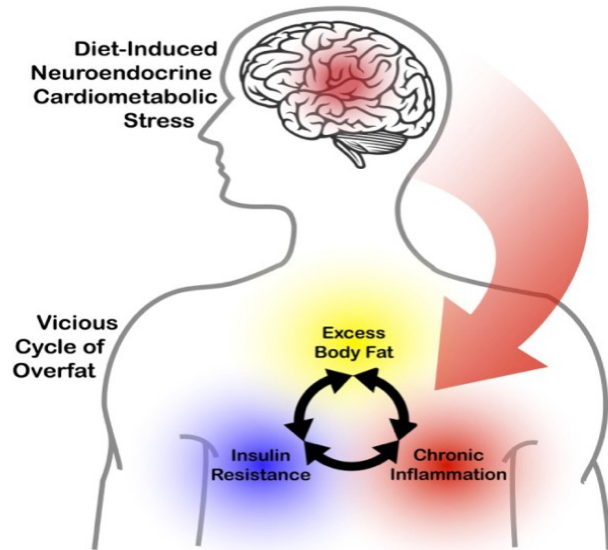
On average, the prevalence of overfat adults and children in developed countries is extremely high, and substantially greater than that of overweight and obese individuals.

In the US, New Zealand, Greece, and Iceland, prevalence of the overfat condition is at an alarmingly high rate of over 90% in adult males and up to 50% in children.

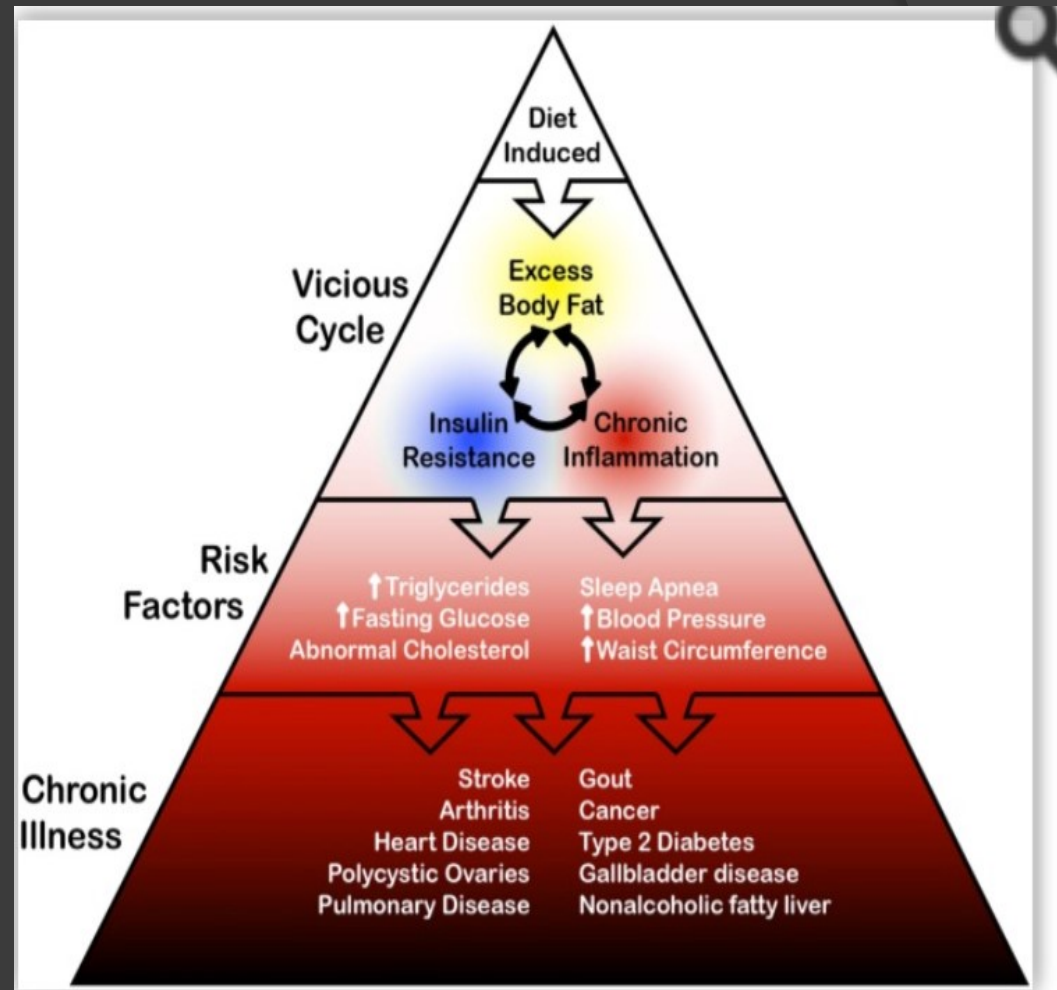
Despite a leveling off appearance of the overweight and/or obese condition in some developed countries, the overfat pandemic continues to grow.

In tandem with an increased average waist circumference, a recent rise in the incidence of abdominal adiposity, the unhealthiest form of excess body fat, has been observed in both adults and children.

# The Overfat Pandemic

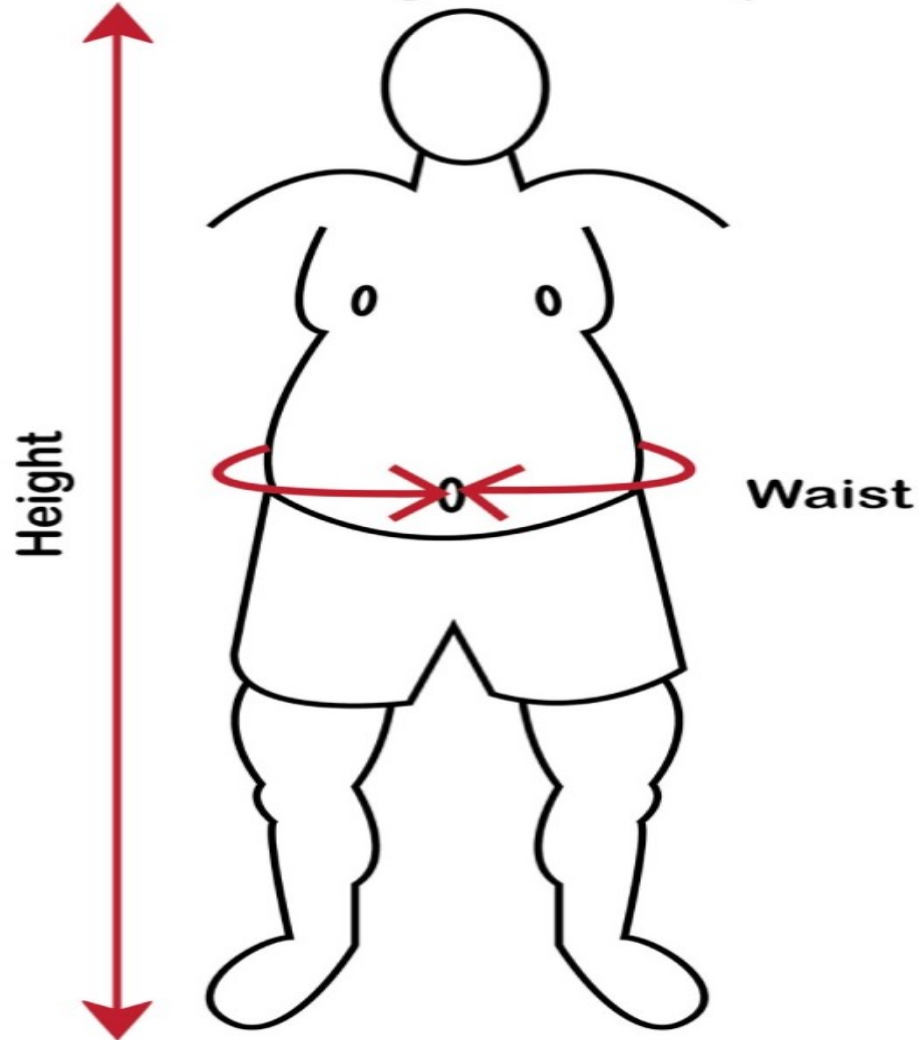


The impact of diet-induced neuroendocrine cardiometabolic stress on the interrelationship between excess body fat, chronic inflammation, and insulin resistance.





## Waist-to-Height Ratio (WHtR)



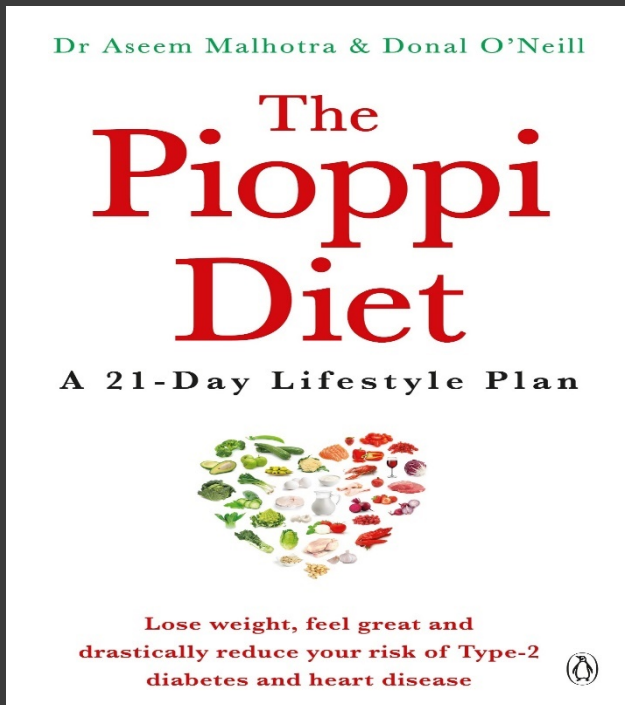
PATIENT EDUCATION

**Waist should be less  
than half your height**

# Pioppi; the home of the Mediterranean Diet



A book that marries the secrets of Pioppi with the latest cutting edge medical, nutrition and exercise science to bust the myths prevalent in today's weight loss, and health industries



- The Mediterranean Diet has been wrongly interpreted for decades
- Eating fat does not make you fat and saturated fat does not clog the arteries
- Cholesterol can be good for you! ( and if you're over 60 "bad cholesterol" protects you from an early death)
- Physical activity and obesity is a myth ( you can't outrun a bad diet)
- Dietary changes is more powerful than any drug for preventing and treating heart disease and type 2 diabetes (which is reversible) and effects/benefits are immediate

**Myth busting**

Editorial



Saturated fat does not clog the arteries: coronary heart disease is a chronic inflammatory condition, the risk of which can be effectively reduced from healthy lifestyle interventions

Aseem Malhotra<sup>1</sup>, Rita F Redberg<sup>2, 3</sup>, Pascal Meier<sup>4, 5</sup>

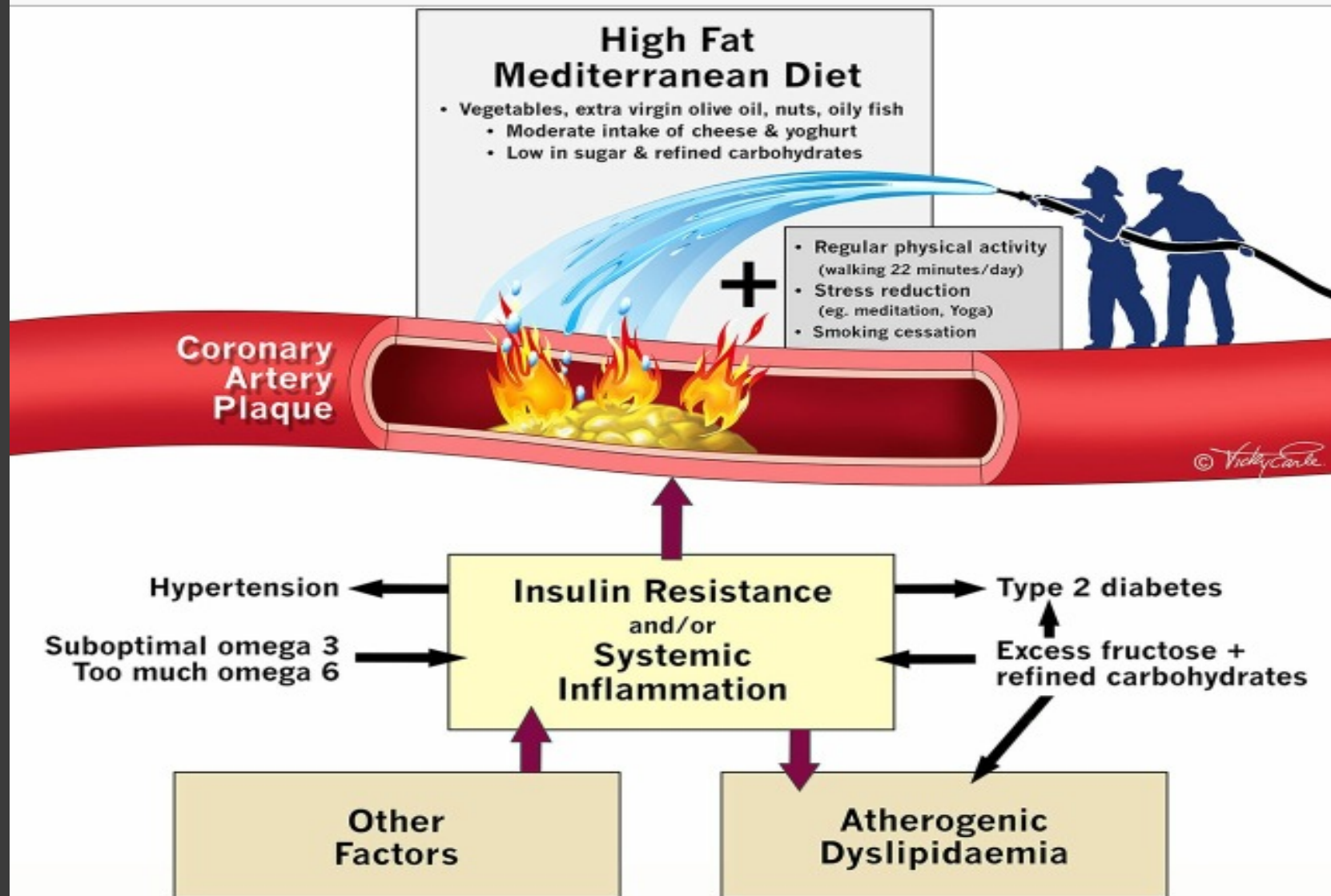
[Author affiliations](#) +

<http://dx.doi.org/10.1136/bjsports-2016-097285>

Statistics from Altmetric.com



[Feedback](#)







Stephen Tai

diagnosed with T2DM - HbA1c = 8.4%. and also suffer Metabolic Syndrome too (Hypertension 160/90 - Waist line 98 cm / weight 78kg / BMI: 30 ) I told my doctors I refuse to take Metformin and Statin drugs. Today after following the advise of the two greatest God sent doctors -( Dr Aseem and Dr Fung) I have totally reversed my Metabolic Syndrome ( Last month my HbA1c = 5.5% , Hypertension gone my daily BP 125/85, My waist line 76cm, my weight: 64.5 kg my BMI: 23 - My fatty liver is now 11% so I can say given time my liver will be back to normal. Once again I would like to say in my Malaysian language Banyak Terima Kasih ( Thank you very Much)

1 hour ago · Like ·  1

# Pioppi Diet Endorsements

*"This book has the power to make millions of people healthier and happier."* **ANDY BURNHAM**,  
*Mayor of Manchester*



*"I am obsessed with The Pioppi Diet. . . I feel leaner, energised, definitely less bloated and more healthy. I genuinely feel like this is no longer a diet plan, it's just the way I eat."*

**SARA COX**, *Broadcaster*







## THE FIGHT AGAINST DIETARY MISINFORMATION CONTINUES...

If we are to beat type 2 diabetes, the truth must be heard

**Men's Health**

By **Men's Health** Posted on January 17, 2018



Most recently, The BDA, reported as a “top authority” by Business Insider, described **The Pioppi Diet as one to avoid in 2018** with Sian Porter of the BDA making a number of misappropriated and factually incorrect statements. She told BBC News that the book was arguing a case for eating a high level of saturated fat when it does nothing of the sort. She then compounded her error by stating that evidence we had used exonerating saturated fat had been “cherry picked rather than looking at it in its entirety,” which is also false.

The book reflected the totality of data using systematic reviews, which revealed no association with saturated fat consumption and the development of heart disease or premature death for healthy people. The book also went on to show that those with heart disease gained no benefit from reducing their saturated fat intake – a conclusion also pointed out in the *British Journal of Sports Medicine*.



**John Cleese** 

@JohnCleese



One should never forget the first principle of the old KGB

" Always accuse your enemy of exactly what you are doing "

03/02/2018, 15:41

---

**24.4K** Retweets **60.9K** Likes

---

# Watson's diet doctor hit by government 'dirty tricks'

**Jon Ungoed-Thomas**

A cardiologist and anti-sugar campaigner whose advice helped Labour's deputy leader Tom Watson lose seven stone says he is the victim of a "dirty tricks" campaign by the public health agency.

Dr Aseem Malhotra advocates a Mediterranean diet low in added sugar and refined carbohydrates. He believes saturated fat – found in cheese and full-fat milk, which scientists recently linked to better heart health – has been wrongly demonised. However, his advice contradicts that of Public Health England (PHE).

Now he says PHE, which he claims has been acting like a front for the food industry, has tried to discredit him.

In an article for The Sunday Times, Malhotra says government health officials contacted health leaders to warn them against endorsing or supporting his advice before the launch of a book he co-authored last year, *The Pioppi Diet*.

The regime is based on the eating habits of the Italian village of Pioppi, where many inhabitants live into their late nineties and beyond. Malhotra's royalties go to charity.

Officials phoned the private office of Andy Burnham, the Manchester mayor and former health secretary, with a warning after he endorsed the

book. Duncan Selbie, the PHE chief executive, phoned a hospital trust in Greater Manchester, Tameside and Glossop Integrated Care NHS Foundation Trust, saying that it should not endorse the diet.

Malhotra's criticism of PHE comes after Professor Sir Ian Gilmore, a senior government adviser on alcohol, resigned over the agency's decision to work with a charity funded by the drinks industry.

Watson said last

**Watson: dramatic weight loss**

week that following Malhotra's low-carbohydrate diet had helped reverse his type 2 diabetes.

He said: "It seems extraordinary that the government agency responsible for helping us get healthy has tried to close down a respected cardiologist who just wants to make people well.

"If they disagree with him, debate with him, but don't silence him."

PHE said that its dietary advice – which Watson ignored to lose weight – is supported by the best scientific evidence.

@JonUngoedThomas

**ST DIGITAL**

Read Aseem Malhotra's article at [thesundaytimes.co.uk](https://thesundaytimes.co.uk)





Support The  
Guardian

# The Guardian

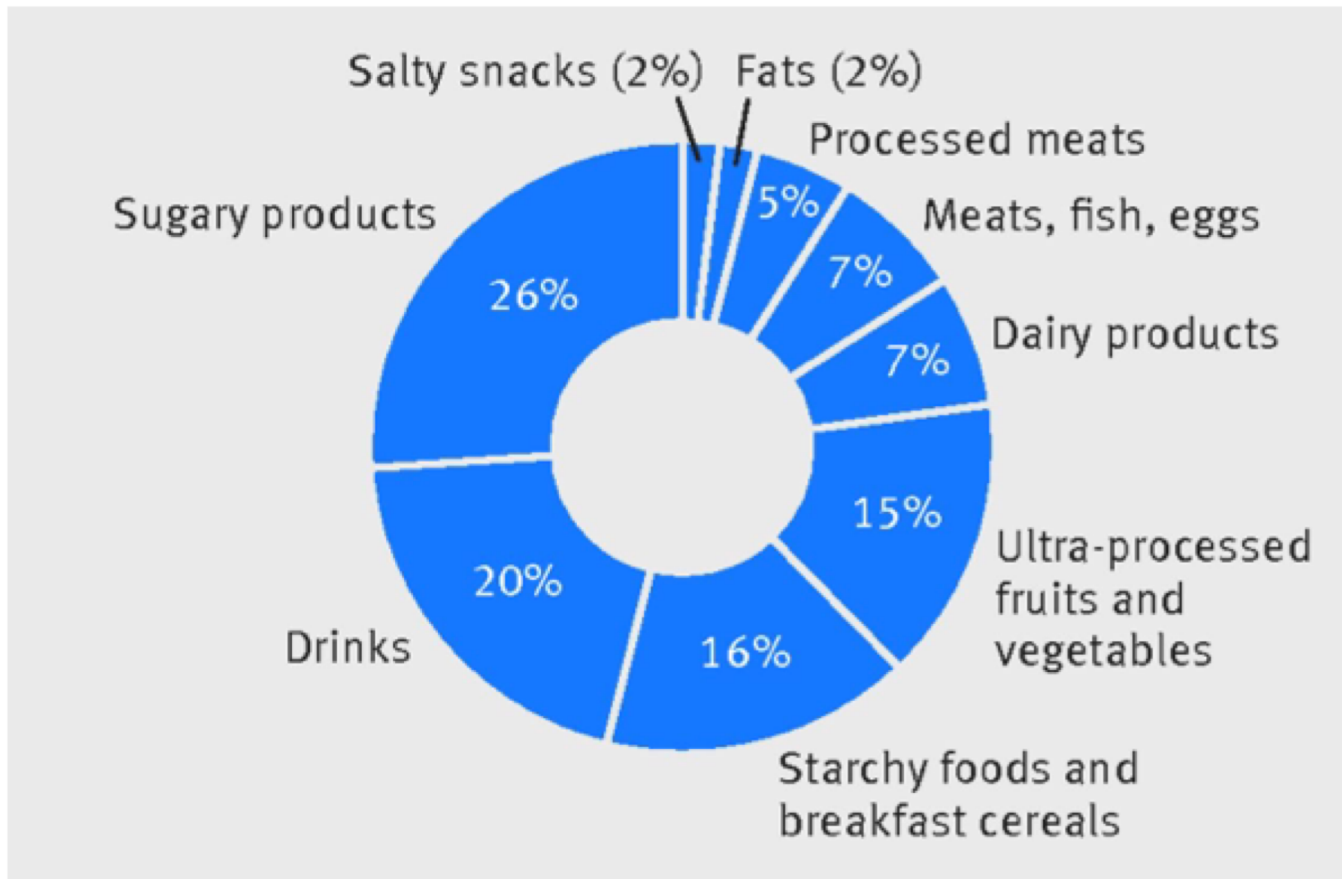
[News](#) | [Opinion](#) | [Sport](#) | [Culture](#) | [Lifestyle](#)



## 'Ultra-processed' products now half of all UK family food purchases



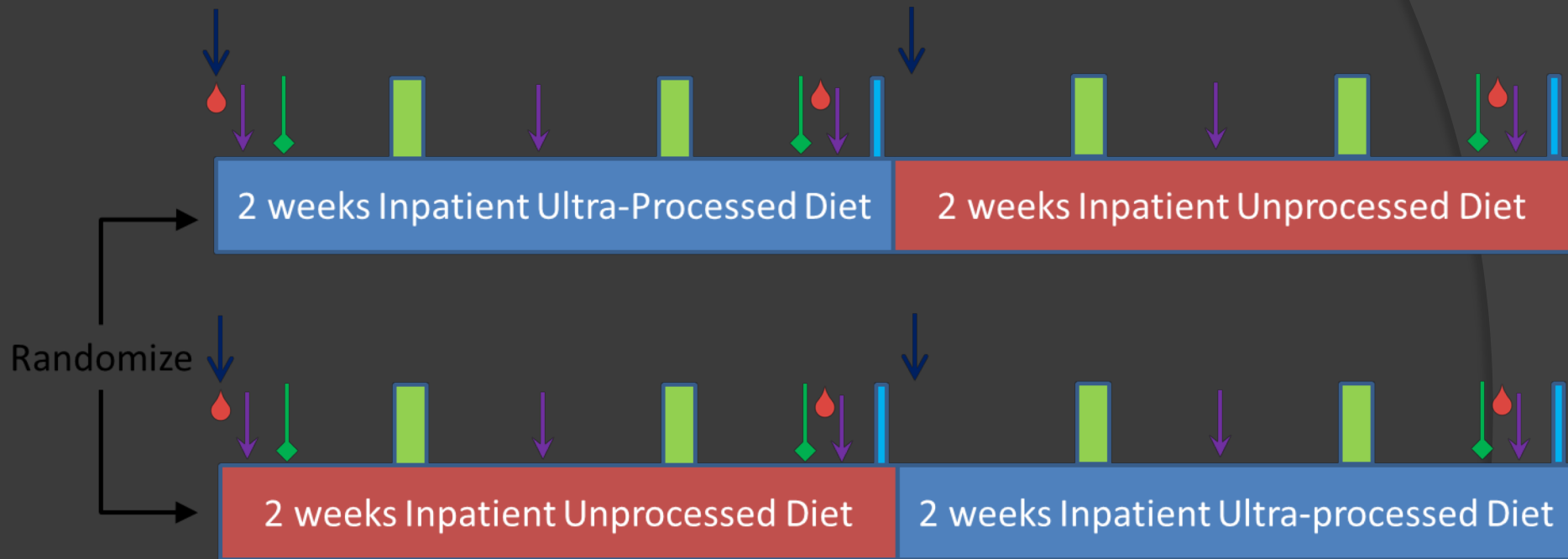
**Relative contribution of each food group to ultra-processed food consumption in diet.**



Thibault Fiolet et al. *BMJ* 2018;360:bmj.k322



# Ultra-processed vs Unprocessed Diets



# Ultra-processed vs Unprocessed Diets

**Ultra-processed Diet**



**Unprocessed Diet**

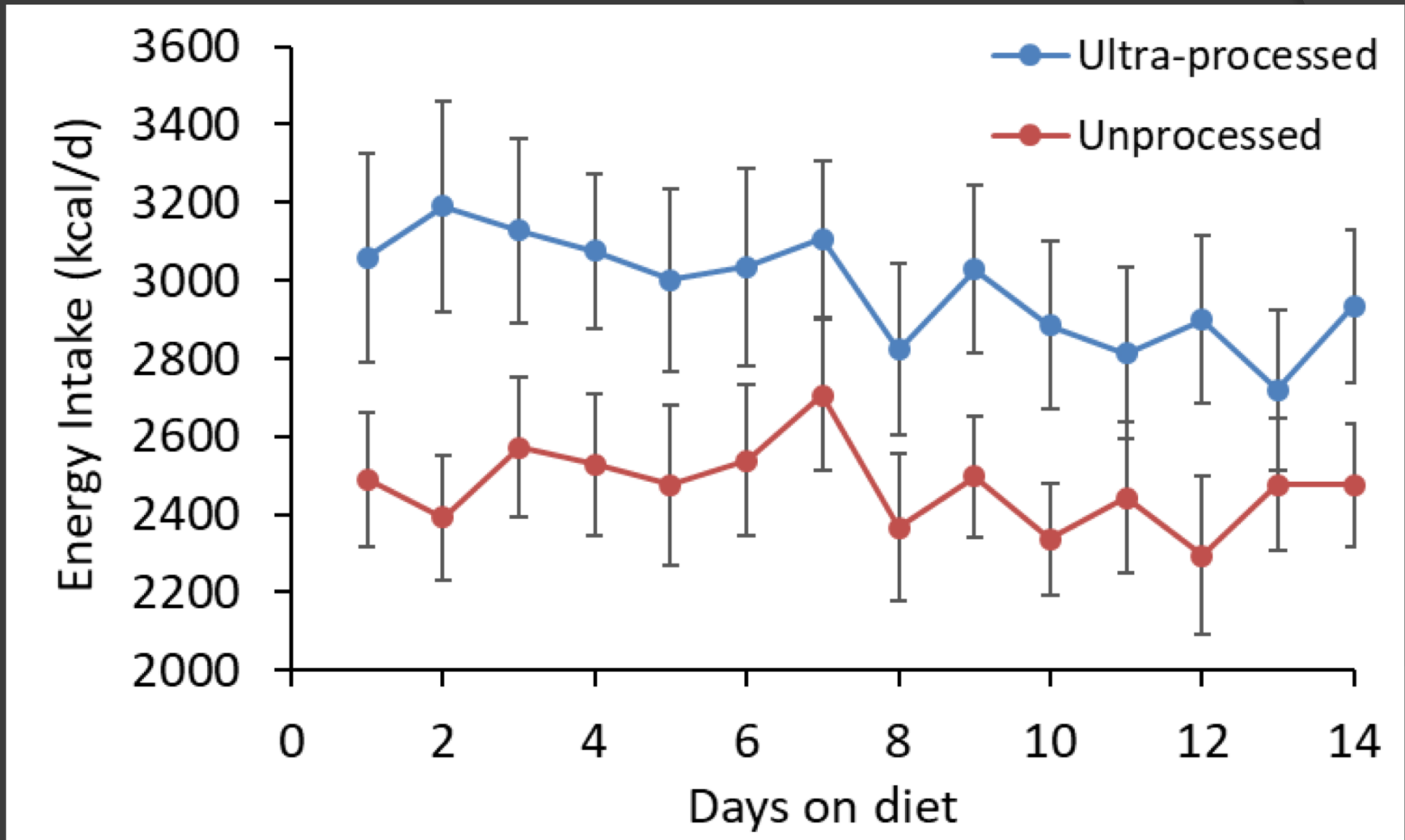


The meals had the same amount of:  
Calories, Carbs, Fat, Protein, Sugar, Sodium, Fiber

20 Adults were instructed to eat as much or as little as desired

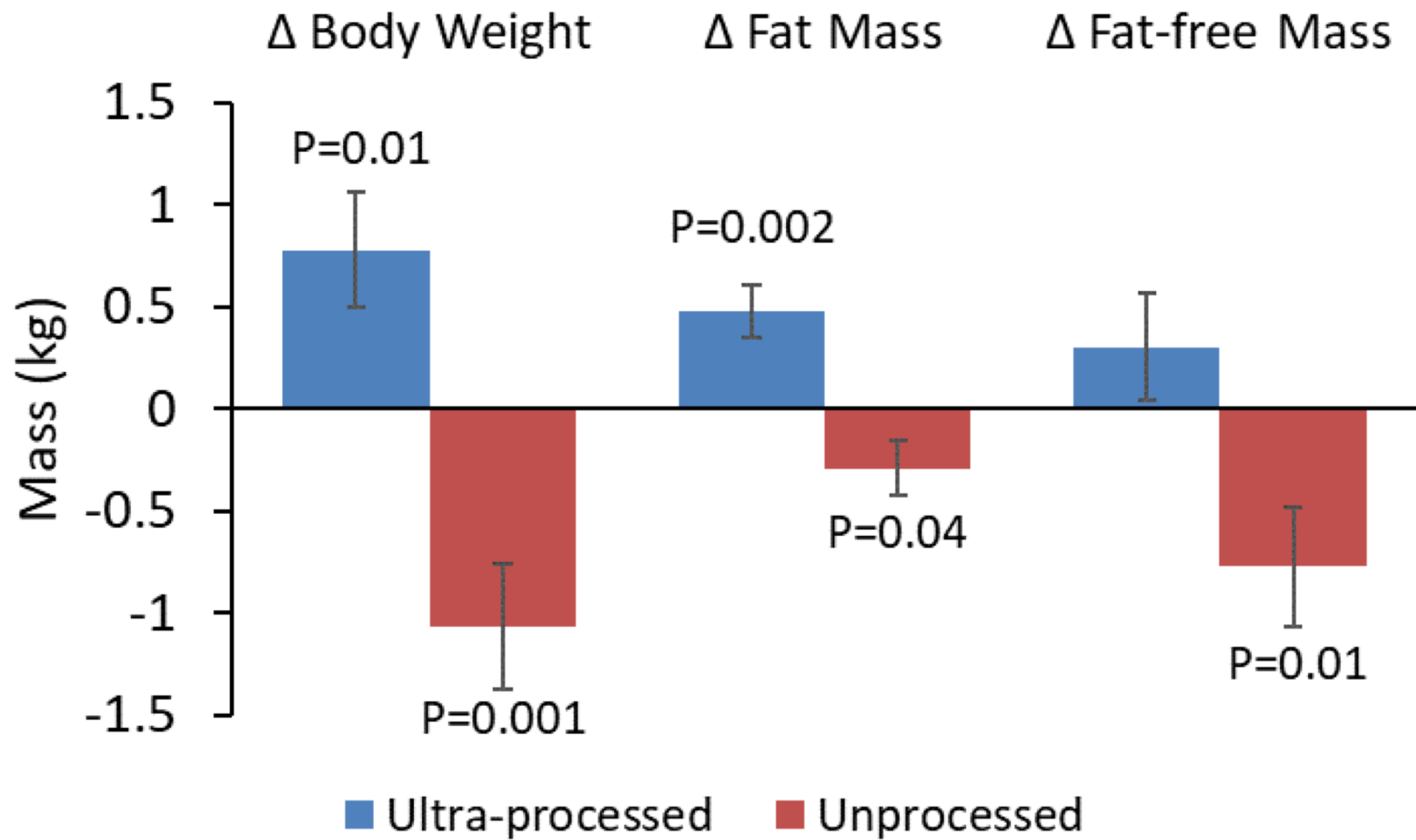
Primary Outcome: Energy Intake Differences over 2 weeks

# Ultra-processed vs Unprocessed Diets





# Ultra-processed vs Unprocessed Diets



ARTICLES | [VOLUME 391, ISSUE 10120, P541-551, FEBRUARY 10, 2018](#)

# Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomised trial

[Prof Michael EJ Lean, MD](#) <sup>†</sup> • [Wilma S Leslie, PhD](#) •

[Alison C Barnes, PGDip](#) • [Naomi Brosnahan, PGDip](#) •

[George Thom, MSc](#) • [Louise McCombie, BSc](#) • et al.

[Show all authors](#) • [Show footnotes](#)

Published: December 05, 2017 •

DOI: [https://doi.org/10.1016/S0140-6736\(17\)33102-1](https://doi.org/10.1016/S0140-6736(17)33102-1) •

## Interpretation

Our findings show that, at 12 months, almost half of participants achieved remission to a non-diabetic state and off antidiabetic drugs. Remission of type 2 diabetes is a practical target for primary care.

## Funding

Diabetes UK.

# Ultra-processed liquid shake and soup to beat Type 2 Diabetes?



## INGREDIENTS

### Spicy Tomato flavour (with sweeteners):

Whey protein, Tomato powder, Maltodextrin, Inulin, Refined soya oil, Soya protein isolate, Potassium chloride, Monocalcium phosphate, Salt, Hydrolysed maize protein, Flavouring, Citric acid, Compound vitamin and mineral mixture<sup>†</sup>, Calcium carbonate, Stabiliser: xanthan gum, Dried parsley, Soya lecithin, Sweeteners (acesulfame K, aspartame\*), Colours (paprika extract, beta-carotene). \*Contains source of phenylalanine. Allergens: Contains milk and soya.



# Kingsmill®

## Wholemeal Bread with Kibbled Malted Wheat

**Ingredients:** Wholemeal **Wheat** Flour, Water, Kibbled Malted **Wheat** (3.5%), **Wheat** Protein, Sugar, Yeast, Salt, Malted **Barley** Flour, Vegetable Oils (Rapeseed, Sustainable Palm), Emulsifier: E172e; Vinegar, **Soya** Flour, Preservative: Calcium Propionate; Flour Treatment Agent: Ascorbic Acid (Vitamin C).

With 62% Wholegrain (Wholemeal **Wheat** Flour, Kibbled Malted **Wheat**, Malted **Barley** Flour).

**Allergy Advice:** For allergens, including cereals containing gluten, see ingredients listed in **bold**.

\*Based on US Dietary Guidelines of 48g of whole grain a day.

### Nutrition Information

Typical Values	Per 100g	Per Slice	%RI* Per Slice
Energy	984kJ 233kcal	394kJ 93kcal	5% 5%
Fat	2.8g	1.1g	2%
of which: saturates	0.6g	0.2g	1%
Carbohydrate	38.6g	15.4g	6%
of which: sugars	4.3g	1.7g	2%
Fibre	6.3g	2.5g	
Protein	10.2g	4.1g	8%
Salt	0.95g	0.38g	6%

\*\*Reference Intake of an average adult (8400kJ/2000kcal).

+RI = Reference Intake

This pack typically contains 20 slices (including crusts)

**Storage:** For best before see bag closure. Store in a cool, dry place - ideally not refrigerated. Under warm conditions life may be reduced.

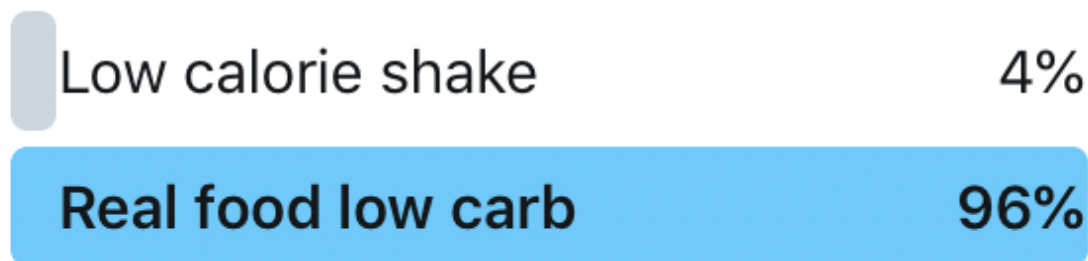
**Suitable for home freezing:** Want to save some for later? Check bag is sealed and then pop me in the freezer and I'll keep for 3 months.





**Dr Aseem Malhotra** @DrAseem... · 1d ▾

Given a choice between an ultra-processed low calorie liquid diet shake (800 calories/day) or a low carb real food approach ( without counting calories) to send type 2 diabetes in to remission with similar results in the short term what would you choose? @lowcarbGP #obesity #NHS



3,643 votes · Final results

# Reflections on a 38-year career in public health advocacy: 10 pieces of advice to early career researchers and advocates

Simon Chapman<sup>a,b</sup>

<sup>a</sup> Sydney School of Public Health, University of Sydney, NSW, Australia

<sup>b</sup> Corresponding author: [simon.chapman@sydney.edu.au](mailto:simon.chapman@sydney.edu.au)

---

## Article history

Publication date: March 2015

Citation: Chapman S. Reflections on a 38-year career in public health advocacy: 10 pieces of advice to early career researchers and advocates. *Public Health Res Pract.* 2015;25(2):e2521514. doi: <http://dx.doi.org/10.17061/phrp2521514>

---

## Key points

- Media attention on a public health issue is often more effective than private

---

## Abstract

There are many important principles and lessons that public health researchers and advocates who hope to influence policy and practice need to consider. In this paper, I set out what I consider to be 10 of the most fundamental of these. Together, these focus on the importance of preserving public confidence in the evidence base underscoring public policy; being clear and concrete about the policy reforms you support; emphasising the values on which policy is based; understanding the structure, conventions and subtextual features of news reporting; developing 'killer facts' with 'earworm' potential; appreciating that the advocacy process leading to policy change almost always takes a long time; and growing a rhinoceros hide to assist in the inevitable attacks you will face.

# Grow a rhinoceros hide!!

“Finally, unless you are an advocate for an utterly uncontroversial policy, as soon as your work threatens an industry or ideological cabal you will be attacked, sometimes unrelentingly and viciously.” Simon Chapman







## Commentary

### **The science against sugar, alone, is insufficient in tackling the obesity and type 2 diabetes crises – We must also overcome opposition from vested interests**

**Aseem Malhotra, Grant Schofield,  
Robert H. Lustig**

**Received:** 04 May 2018; **Accepted:** 04 May 2018; **Published:** 11 May 2018

Big Tobacco sowed doubt that cigarettes were harmful, confused the public, persistently denied their effects, bought the loyalty of scientists and gave ammunition to political allies.<sup>3</sup> As late as 1994, chief executives of every major tobacco firm swore under oath before US Congress that they did not believe that nicotine was addictive or that smoking caused lung cancer.<sup>4</sup>

Now, the science demonstrating sugar's role in diet-related disease is incontrovertible, but science alone cannot curb the obesity and type 2 diabetes epidemics. Opposition from vested interests that profit from diminishing society's health must be overcome.



- ① “ The preservation of the means of knowledge among the lowest ranks is of more importance to the public than all the property of all the rich men in the country” John Adams, 2<sup>nd</sup> US President, 1775.

2022?

# The Daily Telegraph

Small text in the top right corner of the newspaper page.

## UK Reverses Obesity Epidemic!

Placeholder text in the left column, first paragraph.

Placeholder text in the left column, second paragraph.

Placeholder text in the left column, third paragraph.

Placeholder text in the left column, fourth paragraph.

Placeholder text in the left column, fifth paragraph.

Placeholder text in the left column, sixth paragraph.

Placeholder text in the middle column, first paragraph.

Placeholder text in the middle column, second paragraph.

Placeholder text in the middle column, third paragraph.

Placeholder text in the middle column, fourth paragraph.

Placeholder text in the middle column, fifth paragraph.

Placeholder text in the middle column, sixth paragraph.



Placeholder text in the right column, first paragraph.

Placeholder text in the right column, second paragraph.

Placeholder text in the right column, third paragraph.

Placeholder text in the right column, fourth paragraph.

Placeholder text in the right column, fifth paragraph.

Placeholder text in the right column, sixth paragraph.