



PROFESSOR TRIM'S WAISTLINE

THE PROFESSOR'S FEATURES

NO. 22; SUMMER 2007

What drives a man to drink? (non-alcoholic, that is)

It's clear that it's more than just thirst.

We all do it. In fact we have to, to survive! But what is it that drives us to drink? It seems like a no-brainer – thirst! But that doesn't explain why we've increased our consumption of fluids (even excluding alcohol) by about 1% per year over the last 30 years. And why some of that increase has even been from water. If the US is anything to go by the increases for various drinks in that time have been like this:

Water	+ 24%
Coffee	- 4%
Tea	+ 12.5%
Soft drinks	+ 107%
Alcohol	+ 100%
Milk & milk drinks	- 14%
Juices	+ 143%
TOTAL	+ 29%

Pressures to drink

While social drinking has probably increased, this doesn't explain why more people seem to be attached to water bottles these days than babies are to mother's teats. This is particularly interesting when most of these cost a premium, while water is available free! Could it go back to the popular notion that we need 'eight glasses of water/ fluid a day'? If so, where does this recommendation come from? And on

what is it based? Also, are there any other factors that influence our fluid intake?

Drink 8 glasses a day

The 8 glasses a day suggestion – quoted by just about all doctors as coming from their patients – was the basis of an intensive search by Dr Heinz Valtin, from Dartmouth University in New Hampshire. After an extensive search (the details of which were published in the *American Journal of Physiology* in 2002), he found no basis for its suggestion. In fact, he says, humans need between 1.5 – 4L (or 6-16 glasses) a day of fluid, depending on a number of different conditions (age, heat, sex, body size etc.) Still, it's a belief that has stuck, with Valtin showing that the increase in over-all fluid consumption has come since the belief (in the 1970s) about 8 glasses a day became widespread.

Sweetened drinks

Apart from water, sweetened drinks have increased. There are two types: nutritive (ie. naturally sweetened with calorific mixes like sucrose) and non-nutritive or non-calorically sweetened (ie. with artificial sweeteners like aspartame).

Desire for a sweet taste is obvious. But why the need for so much?

Research on learning shows that people who drink sweetened drinks when



thirsty, tend to crave those drinks. This is the Pavlovian conditioning phenomenon. However, if a nutritive sweet drink (eg. like Coke) is drunk even when hungry, there is an increased desire for this the next time hunger strikes! And this can be a problem, because these have calories and are therefore more fattening.

The tactic, it would seem, is to only drink water when genuinely thirsty. For a treat, non-nutritive soft drink is OK, but -full strength soft drink should be avoided or only drunk sparingly.

Juices and other drinks

Despite popular opinion, fruit juices – which have also accounted for the huge intake in fluids – are not exceptionally healthy. They are concentrated in sugars and are therefore quite fattening.

(continues next page)

THE PROFESSOR'S POINT

It's ironic that in an era of environmental consciousness, the sale of drinks in plastic bottles has all but driven the tap or 'bubbler' to extinction. Trendoids can be seen wandering the streets with an MP3 player in one hand and a drink bottle in the other. And while the environmental aspects of this are an issue, health experts tell us the trend is not only unnecessary, but could be potentially unhealthy. Sipping sweetened drinks, without a straw, is a much greater risk for tooth decay than drinking them in one go. Even water sipped constantly could dilute the caries fighting properties of saliva. And for what reason? Sure, we need fluid. But do we need so much of it? Thirst sensors in the body are very effective – and probably more worth listening to than drinks marketers.

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- IS FAT REALLY THE ISSUE?
- SKIN AND SIN
- YOUR NUTS!
- CALCULATING DRINK INTAKE

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Tea, low fat milk and soy drinks on the other hand, are all low in energy and have other benefits. Tea has a high level of anti-oxidants, which fight the effects of other misdemeanours. Dairy and soy products are high in proteins and calcium and other essential nutrients. Their intake can be increased. Coffee can also be increased – to a point (ie. 4-6 cups/day), in those who are not so caffeine sensitive.

Also while non-nutritive sweeteners may be OK for the weight conscious, their acid content (like fruit juice) is not recommended for teeth. They should be drunk through a straw and preferably followed by no-sugar chewing gum.

Fashionable bottled water drinkers who sip this throughout the day might also not be doing their teeth a favour, as this can dilute saliva in the mouth, reducing its ability to fight bacteria.

For reference

Valtin H. "Drink at least 8 glasses of water a day."

Really? Is there scientific evidence for "8 x 8"?

American Journal of Physiology 2002;283:993-1004.

Some facts about fluids

- The average standard sized male requires approximately 2,900 ml (2.9L) of fluid per day in normal (20°C) weather conditions; the average female 2,200ml (2.2L). This is the equivalent of about eleven standard 10oz glasses of water for a man and about 8 for a woman, BUT

- Based on a 2200kcal diet for an average sized woman and 2900kcal for a man, about 700ml of this will come from water in foods for the woman (1000mls for a man) and another 200-250ml from water made in the body from oxidation. The rest, about 5-6, 10oz glasses for a woman and 6-7 glasses for a man needs to be supplied by fluid intake.

- These recommendations assume an average body weight in a normal climate without excessive exertion. Athletes may need to add to this by an extra glass every 30 minutes during exercise, as well as 1-1.5 glasses before the event.

- Although fluid comes in many different forms, alcohol and caffeinated drinks can increase the need for fluid intake because they have a diuretic effect.

- More fluid is needed for individuals on a high fibre diet, particularly if this is in the form of breads, pasta and cereals, because of the need for extra 'flushing' of fibre rich foods in the intestine.

THE PROFESSOR'S PRACTICE

Drinks Intake

To see if your fluid intake could be influencing your weight, answer the following questions. Then calculate a total score by multiplying your answers as indicated, and summing the total at the bottom.

1. How often do you drink alcohol?

4. Every day
3. 4-5 days a week
2. 2-3 days a week
1. 1-2 days a week
0. Never

2. When you do drink alcohol, how much do you usually drink?

(1 standard drink is a midi of beer, 1 nip of spirits or 1 glass of wine)

4. More than 10 drinks
3. 5-10 drinks
2. 2-4 drinks
1. 1-2 drinks
0. Don't drink alcohol

SCORE 1. x 2. = _____

3. How often do you drink soft drinks? (Don't count diet drinks)

4. Every day
3. 4-5 days a week
2. 2-3 days a week
1. 1-2 days a week
0. Never

4. When you do drink soft drinks (not counting diet drinks), how much do you usually drink?

4. More than 10 drinks
3. 5-10 drinks
2. 2-4 drinks
1. 1-2 drinks
0. Don't drink alcohol

SCORE 3. x 4. = _____

5. How often do you drink fruit juices?

4. Every day
3. 4-5 days a week
2. 2-3 days a week
1. 1-2 days a week
0. Never

6. When you do drink fruit juices, how much do you usually drink?

4. More than 10 drinks
3. 5-10 drinks
2. 2-4 drinks
1. 1-2 drinks
0. Don't drink alcohol

SCORE 5. x 6. = _____

Explanation:

All the drinks mentioned here can add to energy intake and hence body weight. Hence reducing the drink or amount drunk will help weight loss.

Scores:

1 or less on any combination: Drinks are not an influence on your weight

1-4 on any combination: Drinks could be a problem

4+ on any combination: Drinks are definitely a problem

THE PROFESSOR'S PARADOX

After all our concerns, is fat really the issue?

"Inflammation" could be the missing link between fat and disease.

For the past decade or more, obesity has hit the headlines (and with all modesty, we remind you that the first Australian reference to this was a cover story on *The Apple and Pear Generation* by your Professor in *The Bulletin*, January 1991). But now that we have the public's attention, scientists are beginning to question just how much of a problem obesity really is. This is not to say that there's not a link between overweight and ill-health. There is. The question is whether it is the excess fat that is causing the problem, or something else.

The story so far

Although 'excessive corpulence', as it was politely known in the days of Charles Dickens, has never been thought to be indicative of perfect health status, it wasn't until the turn of the 20th century that actuarial studies began to show an earlier demise in those with a high weight for height. In the 1940s, French endocrinologist Jean Vague then refined this by suggesting that it isn't *all* fat that is the problem; more that stored around the abdominal region in the form of a 'pot belly'. Subsequent research has shown that this 'apple' shape, more characteristic of men, is much more dangerous than the 'pear' shape displaying lower body, or gluteal fat stores, which is more characteristic of women. In fact, the latter type of body shape appears to be protective against illnesses like heart disease.

Then in the 1990s an even newer type of fat store was discovered. This can't be seen visibly and exists around the viscera, or internal organs of the trunk – the kidneys, stomach, liver etc. It's the white bits that surround the kidneys, liver or heart that you might purchase at your butchers. This was shown to be the most metabolically active (and hence most dangerous) form of fat store.

While visceral fat does have a correlation with sub-cutaneous abdominal fat, the relationship is not perfect. In other words, thin people can have high levels of visceral fat and hence higher levels of metabolic diseases related to this, like Type 2 diabetes and heart disease. Some fat people on the other hand, have very low levels, and hence seem to live, long

healthy lives (apart from the sore knees, hips and other mechanical problems that come from carrying excess body weight).

So, what's going on? Is being overweight actually dangerous and unhealthy – or not? The answer makes the issue even more complicated.

The rise of inflammation

As has been signaled in previous issues of this esteemed (but unheralded) publication, a low level from of 'inflammation', that exists in cells throughout the body seems to be characteristic of many (but not all) people as they increase weight. Normally inflammation signals the response to an infectious disease or injury, but in this case it seems to occur to aspects of our modern lifestyle.

Inflammation has been shown to exist, not just with obesity, but as a result of the types of lifestyle behaviours that cause obesity – like inactivity, excess fat and sugars in the diet, lack of sleep, stress and excessive alcohol intake. In fact these behaviours can result in an inflammatory response even in the absence of weight gain, although they are likely to result initially at least, in increases in visceral fat.

Ingenious research has recently been carried out manipulating some of the chemical markers of inflammation by 'knocking out' genes that produce pro-inflammatory chemicals in rats, and increasing the output from those that produce anti-inflammatory chemicals. This has shown that big increases in fat can occur without a problem if the inflammation is kept under control. The plot thickens.

A new look at fat

Although it's early days, all this suggests an interesting new scenario: The amount of body fat that can be safely stored in an individual appears to have a genetic limit. This is determined primarily by the ratio of sub-cutaneous-to-visceral fat stores within an individual. When times become good, and food intake exceeds the need to be active, fat stores in parts of the body determined by gender (eg. hips vs waist) or genetics, begin to fill up like water in a water bag. Beyond the level

determined by the genes however, this 'spills over' into visceral fat, which then results in an inflammatory response, which is typical of the reaction to an illness or injury. For some people this occurs at a low level of total fat, but as a result of lifestyle. For others, a significant weight gain needs to occur before it causes problems.

In other words, in many cases at least, fat could be just a 'marker' of potential problems rather than a direct cause. In other cases it may not even be that, but just be a sign of good times.

How do you know which type of fat storer you are? At the moment, a pot belly is still the best indicator. However measures of inflammation through a number of different chemical measures (not unlike the measures of cholesterol used) are likely to be available soon, this making the prediction of illness from weight gain a more exact science. Like smokers who live to 100, this could help relieve the anxiety for many of the 'apple and pear' generation.

For reference

Kim J-Y. and others. Obesity associated improvements in metabolic profile through expansion of adipose tissue. *Journal of Clinical Investigation* 2007;117(9):2621-2637.

THE PROFESSOR('S) GAGS

(This one to show that, despite contrary reports, the Professor is NOT more misogynous than Norman Mailer)

The wife is in the kitchen preparing to boil eggs for breakfast.

Her husband walks in. She turns and says, "You've got to make love to me – this very moment."

Not wanting to lose the moment, he embraces her and then gives it his all on the kitchen table.

Afterwards she says, "Thanks," and returns to the stove.

More than a little puzzled, he asks, "What was that all about?"

She explains, "The egg timer's broken."

THE PROFESSOR'S FIT BITS

Now it's the 'global warming diet'

Joining two bandwagons – dieting and climate change – US experts have come up with a caravan. They call it the 'global warming diet', because not only does it decrease fat on an individual's body, it decreases carbon emissions into the atmosphere.

How does it manage both feats? By increasing personal energy expenditure (eg. through walking etc), and decreasing carbon emissions from the energy of non-renewable fossil fuels (eg. from less driving of cars etc).

In a typical atmosphere of global megalomania, said experts believe such a brilliant, revolutionary idea could come only from the US, thus ignoring the Professor's forays into this area in PTW (Autumn 2007) and the Australian Medical Journal (August 2007). Still, in the words of Oscar Wilde, "it's better to be mimicked than shunned" (or something like that).

The proposal? Get out of your car and walk, or ride a bike for half an hour a day instead of driving. The average person walking an extra half an hour a day would lose about 6kg a year and burn around 100 litres less fuel, or 230kg of carbon (around 12% of the current annual Australian emission per person). And while you're at it, eat less processed, high energy-dense food, which takes a lot of carbon creating energy to manufacture.

If you're also kind to each other, eat your vegetables and get to bed early, the world would be a much nicer place!

NZ rejects obese worker

In a first case of its kind, an English skilled worker was recently denied entry to New Zealand until he could pass a fat measurement test, under new immigration guidelines.

Richie Trezise (pronounced Tree size??), an English submarine cable specialist headhunted for a job with

Telecom, was forced to slim down before the New Zealand Immigration Service would let him in. He was denied an employer-backed talent visa when he failed the Body Mass Index test (BMI), coming in at a measure over 40, which made him 'morbidly obese'.

After losing 5cm around his waist he was allowed to start work in New Zealand in September. However he now has the problem of getting his wife into the country. The case could provide a precedent for other forms of limitations for those with weight problems.

Less sleep, more fat

Although the connection has been suspected for some time, several studies have now shown a connection between lack of sleep and increases in body weight. This has been shown to occur early in life, with children as young as five or six having a greater risk of becoming overweight later in life if they sleep less than seven hours a night on a regular basis.

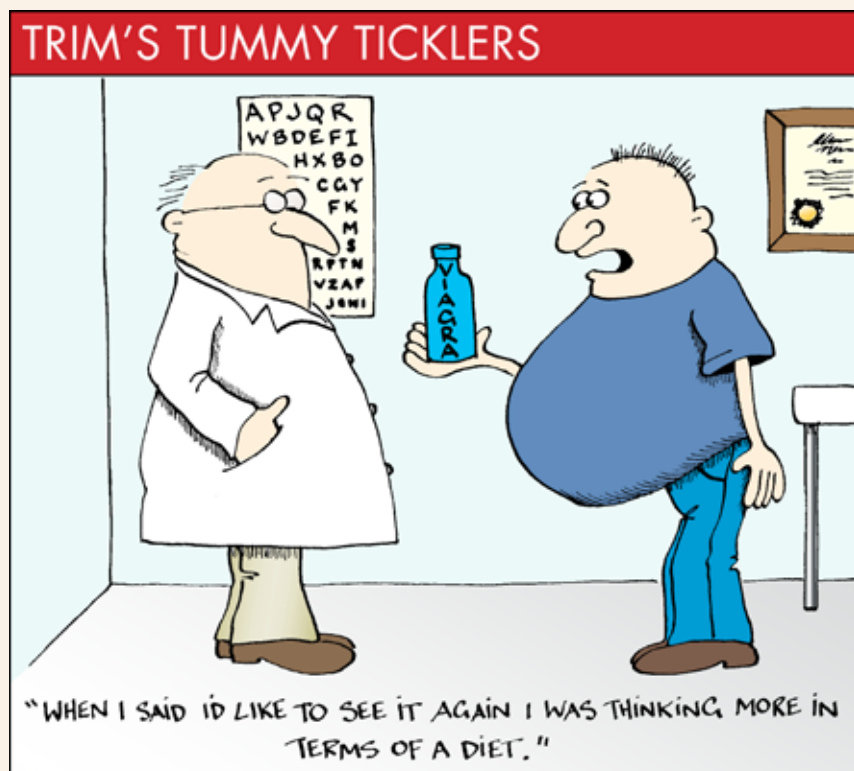
One reason for this might be obvious: The longer you are awake, the more time you have to eat. And given that this time is not likely to be spent being active, the extra energy intake will quickly develop into extra body weight.

More detailed research however has also shown that certain hunger hormones, particularly one called *leptin*, are increased with extra waking hours. It's proposed that this goes back to evolution when longer periods of wakefulness were associated with getting more food in lean times. Irrespective of the cause it seems sleep is important – and we're getting less and less of it with our busy modern lifestyles.

Viagra and hearing loss

There's got to be a good joke in this somewhere – but we haven't heard it yet: Viagra, and the class of erectile dysfunction drugs that this is derived from (phosphodiesterase type 5 inhibitors), will soon carry prominent warnings about potential sudden hearing loss on the label. This follows 29 cases of sudden hearing loss dating from 1996 after use of these drugs in the US. As well as Viagra, this includes Cialis and Levitra. The Federal Drugs Administration (FDA) in the US said hearing loss mostly occurred in one ear and was temporary in a third of the cases. (One wonders if it could have been from the loud exhortations to 'get off' funnelled into that one ear).

PS. You may not be aware that Viagra, which was originally a heart treatment drug, was discovered as a sexual aid when men kept asking for it even after it was found not to work for their heart problems. In medication research this is called 'serendipity'. In male users it's called 'happiness'.



Skin and Sin

How being fat can affect your skin as well as your gut

Sure, it's poetic licence, but gluttony *is* one of the seven deadly sins and obesity *can* come from gluttony. But let the Professor get on with it:

As we've been saying in the past few PTWs, obesity is an 'inflammatory' disease: Excess body weight has been found to be associated with a form of low-level inflammation in blood vessels and cells throughout the body. It is this, which seems to be the link between obesity and certain forms of disease, like diabetes (see article this issue).

Obesity has also been shown to have an effect on skin, and a number of forms of skin damage, generally called

'dermatitis', are now associated with carrying extra weight. Many of these also have associated inflammation. Hence, the link between skin problems and being overweight (a) appears real and (b) could be linked through the inflammatory processes.

Skin and Obesity

Problems include those that come from insulin resistance (like *acanthosis nigricans* or the brown patchy spots on skinfolds), infection (like *intertrigo* or itchiness in skin folds and under the feet); inflammation (like *psoriasis*) or metabolic problems (like *tophaceous gout*). There are also problems that

result from the mechanical pressures of carrying too much weight. These include *cellulite*, *striae distensae* (stretch marks), *lymphedema* etc.

The solution: Of course see a dermatologist to get advice on medication for topical treatments, but also lose weight. Like so many other obesity related problems, this can change the reaction of the skin – one of the body's biggest organs!

For reference

Yosiovitch G and others. Obesity and the skin: skin physiology and skin manifestations of obesity. *Journal of the American College of Dermatology* 2007;56:901-916.

Some skin care myths for men

It may not seem related to weight, but skin is another area of popular mythology which applies to men as much as to women. In a new book due out in 2008 (see reference below), some of these myths are exposed. For example:

The more hair is shampooed the healthier it is

Over shampooing can dry out the cuticle cells of the hair follicle, which in healthy hair, should be tightly packed and overlap each other like scales on a fish. Spaces open up between the cells with excessive shampooing, allowing the shampoo to penetrate into the body of the hair follicle causing further damage, through the process known as 'weathering'. With weathering, individual hairs become thinner and tangle more easily. They also break off and develop into what is commonly known as 'split ends'. Contrary to the ads therefore, shampoo can cause more damage than it heals. A plain conditioner, which has less detergent, is less damaging to the hair.

Saunas and steam baths are good for the skin

Saunas...have little or no value in 'cleansing' the skin. They also have no effect on fat loss, the only loss being weight from water lost in sweat, which is quickly replaced. Saunas provide a psychological feeling of well-being which shouldn't be under-valued. However, they have little or no value in 'cleansing' the skin. Even in Finland, where there is said to be one sauna for every four members of the population, the benefit of the practice is now being questioned.

A hair dryer is the best way to dry hair

Hair is in good condition when the cuticle cells on the hair shaft are tightly packed on top of each other and the outer surface is coated with an extremely thin layer of grease or *sebum*. When this is the case, individual hair shafts are waterproofed and shiny, and water from washing the hair should run off like "water off a duck's back". It should also dry easily with the aid of a towel. Where a hair dryer is used on hair that is already damaged by over shampooing, the exposed hair shaft can become vulnerable to extra weathering. Hence, while the use of a hair dryer occasionally with healthy hair is not likely to cause problems, over-use with hair that

has had its protection washed away by the overuse of shampoos could just cause more harm than good.

An after-shave or antiseptic should sting

Market research in the US has shown that unless an after-shave or antiseptic 'stings' it's thought by consumers to have no value. This is based on the 'no pain, no gain' philosophy which has no basis in fact. The use of these substances can cause dermatitis and changes in pigmentation due to the action of the sun on some of their constituents. Hence it's not necessary, and indeed may be unwise to go for a product that provides a 'bite'.

Skin should be kept dry ie. with baby powder

There is no truth in the notion that dryness is good for skin. In reality, the best way to protect the skin from the external environment is to 'water-proof' it so that it can defend itself. The use of talcum powder has little value in this. No matter how fine a talcum powder is, it will tend to clog and form itself into little granules in folds of skin like the toe webs, causing abrasion. If two surfaces are to glide smoothly over each other, this is best achieved by polishing the surfaces. Adequate moisturising not only water-proofs, but also facilitates the smoothness of one surface gliding over the other.

Most skin problems are unavoidable

While this may be the case in a neutral environment, many skin problems can today be put down to the modern environment and human behaviour – air conditioning, overheating, shampoos, soap, chemicals etc. For full details on all of this see the reference below. To check environmental causes of damage see the box on this page.

For reference

Molloy H, and Egger G. *Skin Fitness: How to protect your body's biggest organ in the 21st Century*. Allen and Unwin, Sydney (due in January 2008).

'Skindex'

A list of modern skin problems with a possible lifestyle cause:

1. Dry, rough or scaly skin which may or may not be itchy
2. Redness, greasiness, rashes, persistent acne with no obvious cause
3. Recurrent tinea pedis
4. Limp, lifeless, stringy or greasy hair
5. Dark, baggy rings around the eyes ('doona eyes')
6. Comedones ('whiteheads') on the forehead, cheeks and chin
7. Redness and itchiness between the breasts
8. Disturbed sleep
9. Feeling tired/washed-out on waking up
10. Unexplained morning sneezing, runny nose and/or dry throat



You've probably heard the argument that 'nuts are good for you', and wondered why anyone promoting weight loss will advise you to steer away from them. The answer is complex but let's have a go at it anyway:

The ingredients of nuts

Nuts are a small package of high quality food. They contain a combination of 28 essential nutrients, in different proportions according to the type of nut (see table). But because they contain high energy-dense fats they are also a

small package of energy. That means you get lots of calories for a small quantity of food – even if some of those fats are 'good' fats.

Nuts are also high in a form of soluble fibre, which helps digest cholesterol. Together with the mono-unsaturated fatty acid (MUFA) form of fats that are high in some nuts, these could also help manage blood sugars and therefore be of benefit to diabetics, or those prone to diabetes. BUT they are a small package of energy, and hence have to be looked at in different ways for best outcomes. In summary, those ways are as follows:

1. If you have a weight problem, either avoid nuts or keep to a minimum. Also totally avoid salted nuts as these are easy eat over-eat.
2. If you don't have a weight problem, a small amount of mixed unsalted nuts each day is advisable. This is even for those with high cholesterol. The nuts with the most MUFAs are likely to help most.

3. If you don't have a weight problem, keep the intake of salted nuts down to a minimum. Because it is easy to eat over-eat these (because of the salt), you could have a weight problem before too long if you eat too many.
4. If you don't have a weight problem but have a cholesterol problem avoid salted nuts totally. Because it requires oil to make the salt stick, and because this is usually saturated fatty acids (SAFA), like palm oil (because it's the cheapest), it will add to your cholesterol (and potential weight) problem.
5. If you are a drinker (of alcohol) and have weight problem or are thin with a cholesterol problem *definitely* avoid salted nuts. The drinking makes you eat more and the salt makes you drink more – a bad mix!

Check the table below to pick the best type of nut(s) by nutrients. Or better still, make it a small handful of mixed, unsalted nuts each day – once your weight is under control.

Nutritional Qualities of Raw (unsalted) Tree Nuts (g/100g)

	Energy(kJ)	Protein	SAFA	MUFA	PUFA	N3(mg)	Fibre	CHO
Almond	2525	20.0*	3.6	36	13.1	-	8.8	4.4
Brazil	2888	14.4	14.8*	21.8	29.0	-	8.5	2.4
Macadamia	3068*	7.6	10.3	61.4*	0.9	-	6.0	4.5
Pecan	2977	9.8	4.5	39.1	24.8	600	8.4	4.9
Pine Nut	2981	13.0	4.2	23.0	39.8	-	5.1	4.5
Pistachio	2530	19.7	5.8	26.6	15.8	-	9.0*	15.1
Cashew	2437	17.0	8.4	31.1	7.5	-	5.9	16.8*
Walnut	2901	14.4	4.4	12.1	49.4*	6300*	6.4	3.0

Legend: SAFA = Saturated Fatty Acids; MUFA = Monu-unsaturated fatty acids; PUFA = Polyunsaturated fatty acids; N3 = Omega 3 fatty acids; CHO = Carbohydrate. * = nut with highest score on that nutrient.

Explanation: Protein is good for satiety and muscle maintenance (with exercise in older people); saturated fats and total energy should be reduced for health & weight loss; MUFAs are 'good' fats which may reduce cholesterol and have less effects on body weight; SAFAs are OK fats which may have some health benefits but still might affect body weight; N3 (Omega 3) fats are good for heart health; CHO here is generally low Glycemic Index (GI) and therefore OK for health. Fibre is good for satiety, cholesterol and bowel cancer prevention.

THE PROFESSOR'S POETRY

INSIDE THE RUGBY CAMP

'Twas one fine day in early May,
An all the town was there;
To watch with pride their local side,
And Rugby filled the air.

The toss was won, the game begun,
The kick off meant the start.
But from the ruck a theme was struck,
That broke the locals' heart.

The heads went down, the bums went up,
The feet felt for the pill;
When from the mob there burst a bod
That stunned them on the hill.

His head was big, his body huge,
His hands were much the same;
T'was plain that he could hold the key
For locking up the game.

The locals shrank, to be quite frank,
Before the tourist's eyes;
They'd played 'em keen, they'd played 'em mean,
But never quite that size.

He stood there tall and held the ball
Above their feeble jumps;
Till one they saw, the boots he wore
Were ladies ballet pumps.

Then their surprise took in his eyes
With makeup showing clear;
And one did shout his feelings out
"The blokes' a flamin' queer!"

With bold new verve they found the nerve
To rush him all in time;
But he was set to pirouette
And tiptoe down the line.

With half pike twist and one limp wrist
He fended off the hosts;
Then sashayed by their fullback's try
To score between the posts.

The tourists ran to thank their man,
Lest they should feel remiss;
But outstretched hands heard his demand
"I'd much prefer a kiss."

Now that first try was no fluke because
Three more soon came his way;
With Broozier Bruce as front row loose
The game was surely gay.

And the game went by and Brucey's tries
Weren't all he had for fun;
With a goose for all in each loose maul
And kisses in the scrum.

And he stated then: "What lovely men
It seemed to go so quick;
It's such a shame, I spoilt their game
Oh I do feel like a prick."

Now the locals baulk when there's any talk
Of the day that hurts them still;
When the front row queen took the home side team
And trashed them 50 nil!



PROFESSOR TRIM'S TABLE TALK

CHICKEN AND BLACK BEAN BURRITOS

Makes 4 burritos

*250 gms cooked chicken breast,
shredded or chopped
1 cup cooked black beans (if
using canned beans, rinse well
and drain)
1 440 gm can Mexican-style
stewed tomatoes
1 tablespoon fresh lime juice,
optional
4 250 mm flour tortillas
1/4 cup shredded reduced-fat
Cheddar cheese
1/4 cup low-fat sour cream
Chopped cilantro, for garnish*

Combine chicken, beans and tomatoes in a saucepan. Simmer until most of the liquid evaporates, about 10 minutes. Stir in lime juice.

Meanwhile, heat tortillas in microwave or stove top according to package directions.

To assemble: Spoon chicken mixture down center of each tortilla. Top each with 1 tablespoon cheese and 1 tablespoon sour cream. Sprinkle on some cilantro and roll up tortilla.

Note: This is a great way to use leftover cooked chicken. Or skip the burritos and serve the chicken mixture over rice.

Should over-50s increase protein intake?

Losing muscle with age can be a problem. Combined with an increase in fat, this can reduce the ability to carry out daily tasks, increase weight gain and lead to damaging falls.

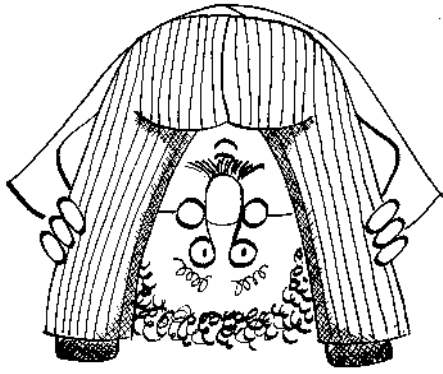
Weight training is a way of at least maintaining muscle mass in the elderly. But studies examining this have had conflicting results, giving rise to the suggestion that lean body mass loss is an inevitable function of ageing.

Using weight training in older men

after eating a normal omnivorous diet or a lacto-vegetarian diet, researchers have found increases in strength in both groups. But muscle mass usually increases in the meat-eating group whereas it decreases in the vegetarian group, suggesting animal protein is better for musculo-skeletal benefits in the aged.

Protein is also best taken up in muscle if eaten within one hour before or two hours after resistance exercise.

PROFESSOR TRIM'S REAR END



Bodybuilding and belly fat

Bodybuilders are the experts when it comes to losing fat before a competition. Drastic techniques such as severe carbohydrate restriction and exercise techniques enable muscle definition to be displayed with minimal fat covering. But what happens after such drastic initiatives?

A study by sports scientists at Michigan University has shown that the regain in fat that occurs may be disproportionate to where it has been lost, with an increase in potentially dangerous abdominal fat. A small group of bodybuilders were studied for 6 weeks prior to a competition and although they began this period quite lean, they were found to lose a significant amount of body fat (4.2kg) in the 6-week lead-up period. Losses tended to be greater from the trunk (36%) compared to the limbs (26%), which might be expected.

Ten weeks after the competition however they had regained an average of 6kg, most of which was stored around the waist. The ratio of trunk fat to limb fat had actually risen from

around 1, to almost 1.5, suggesting an increase in abdominal fatness. Abdominal fat is regarded as the potentially most dangerous type of fat store for later disease. This suggests a negative long-term effect of the type of severe weight loss induced in body builders. *Message:* If you want to be buff, stay buff, not super-buff.

Might weight be a useful measure after all?

The standard clinical measure of overweight and obesity is the Body Mass Index (BMI) or measure of weight for height. However, as the Professor has repeatedly pointed out, this is not a good measure of fatness at the individual level. It discriminates against men, those with a high muscle mass, and the elderly (who shrink with age). Waist circumference is a better indicator of excess fat stores in men, and we use this as a guide to success on the PT program.

But does that mean that weight should be disregarded altogether? In a small number of men, fat will come off parts of the body other than the belly during a weight loss program. This is picked up by weight loss before it is noticeable as waist loss. Hence there may be occasions when weighing may have some value.

Published research has shown that a 1cm waist loss for the average man is equal to about 1/2 - 1 kg in weight loss. But this is highly variable. Waist measurements alone don't always tell the true story.

The best of both

To cater for the lack of sensitivity of waist measurements in measuring change, and the lack of validity of

weight in measuring fat, it's now suggested that both waist and weight measurements be used in a fashion shown in the box below. Both are simple to take and provide a foolproof indication of risk, as well as a measure of change.

If you've thrown away the scales and are getting good losses with your tape measure, don't worry about anything else. However, if you've noticed no waist loss, it might be time to have a look at your weight. If this is coming down it means it's coming from parts other than the waist. It will eventually come off the waist, but the sequence might be a little different for you than others.

Alcohol, food and weight gain

We've said all along that alcohol *per se* is not fattening *per se*. Of the three biochemical means of metabolising alcohol, none result in its conversion to fat. However alcohol is not totally innocent in the lard production department.

Research from several centres shows that our inhibitions go down when we have a drink. Hence those fattening salted peanuts look more appealing, and the means of resisting are less after a few drinks. Food intake also tends to increase when alcohol is drunk with a meal. Some studies show this could be as much as 200kcal a meal, which could mean an extra kilo every month or so. This is particularly so if the meal is preceded by high fat pre-dinner snacks and alcohol (e.g. beer and peanuts).

It's also true that too much alcohol (ie. a binge) is not only bad for the overall health, but tends to cause changes in eating behaviour the next day. How often have you felt like a salad and fruit, rather than bacon and eggs the morning after hanging one on for example? So while the odd drink may not be a cause of concern (except in those aggressive types), there's no reason to take it up if you are a non-drinker. If you like a tipples, here's some advice for the health (and weight):

- drink small amounts frequently (rather than binge infrequently), but also
- have a couple of AFDs (alcohol free days) per week
- avoid high energy mixes (soft drinks, fruit juice etc)
- watch what you eat when you drink
- be conscious of how much you are eating when drinking with meals

Process for using weight and waist measurements of body fat

1. Take weight and waist measurements at the start of a weight loss program.
2. Measure around the waist at the umbilicus (navel) for men, and the narrowest point between the lower hip and upper hip for women.
3. Do not measure weight again until 6-8 weeks after starting a program of weight loss (this allows for initial discrepancies in weight caused by changes in muscle). Then weigh yourself no more than monthly after this.
4. Take waist measurements weekly over the first 6-8 weeks, then monthly after that.
5. Don't become obsessed with either weight or waist measurements. Instead, learn what it feels like to be at the right weight.