



DR ROSEMARY STANTON measures how the media stacks up when it comes to serving up information about fruit intake, high protein diets and the benefits of vitamin and mineral supplements.

HARDLY a day goes by without some aspect of food or nutrition appearing somewhere in the news. The flow of media releases on the topic has only increased to satisfy the constant demands of a 24-hour news cycle.

Although some media releases come from medical and scientific journals detailing new research or a new review of old studies, food and drink companies also retain PR experts to distribute stories promoting particular products — especially anything new, reformulated or approved by an expert they have brought in for a conference.

The news ‘grabs’ achieved are valued as an adjunct to traditional

advertising. Conflicts of interest may fly under the radar. A busy GP may not notice publicity about foods, but patients do — and some expect their GP to sort things out for them.

What's on the media menu?

Journalists and editors in the lay media can be willing conspirators in dishing up stories about particular foods or diets, especially if they can rake up any controversy. Indeed, sometimes only a topic that generates a good stoush will get a run, mainly because disagreement can

generate newspaper, talkback and online correspondence that will last for days.

The current media menu includes

stories about whether to eat fruit, whether to take vitamin and mineral supplements and whether a low-protein diet can cause weight gain.

In general, those with a product to promote or who have particular theories to support will often favour ‘reviews’ of the evidence. Some inflate the influence of a particular finding or viewpoint (perhaps unwittingly) by quoting a number of studies, without noting that sometimes results of a single study are published with a slightly different emphasis in several journals. Therefore, one study published in two journals and reviewed in a third can be quoted as “three studies”.

Many journalists — and most people — go to the internet for 'evidence' on any topic. There are some sites with helpful information, but many more carry rubbish.

Many fail to understand that volume bears no relation to veracity. For example, I recently googled "detox diets" and 5,370,000 results appeared (in 0.08 seconds), but I know that doesn't change the fact that the cleansing theory and the diets themselves are nonsense. Others don't know this.

Stop eating fruit to lose weight?

Some Sunday newspapers recently trumpeted that anyone wanting to lose weight should stop eating fruit. The claim arose from a trial conducted in a Melbourne hospital where the participants are asked to restrict alcohol and carbohydrates

from refined sugars, white rice, pasta — and fruit. The doctors involved are quoted as saying fruit is restricted because it is "full of sugar".

I was aware of the trial — small, not yet complete and not published — and was pleased when several journalists asked for my opinion.

Any food consumed in excess has the potential to add excess kilojoules. That certainly applies to fruit juice. Eating five apples would stump most people, but their juice (and all the kilojoules) can be swallowed in a few seconds. I have no hesitation in classing most apple juices as little more than cordial with added vitamin C and recommending that most people need to restrict their consumption of most juices.

For juices made from crushed

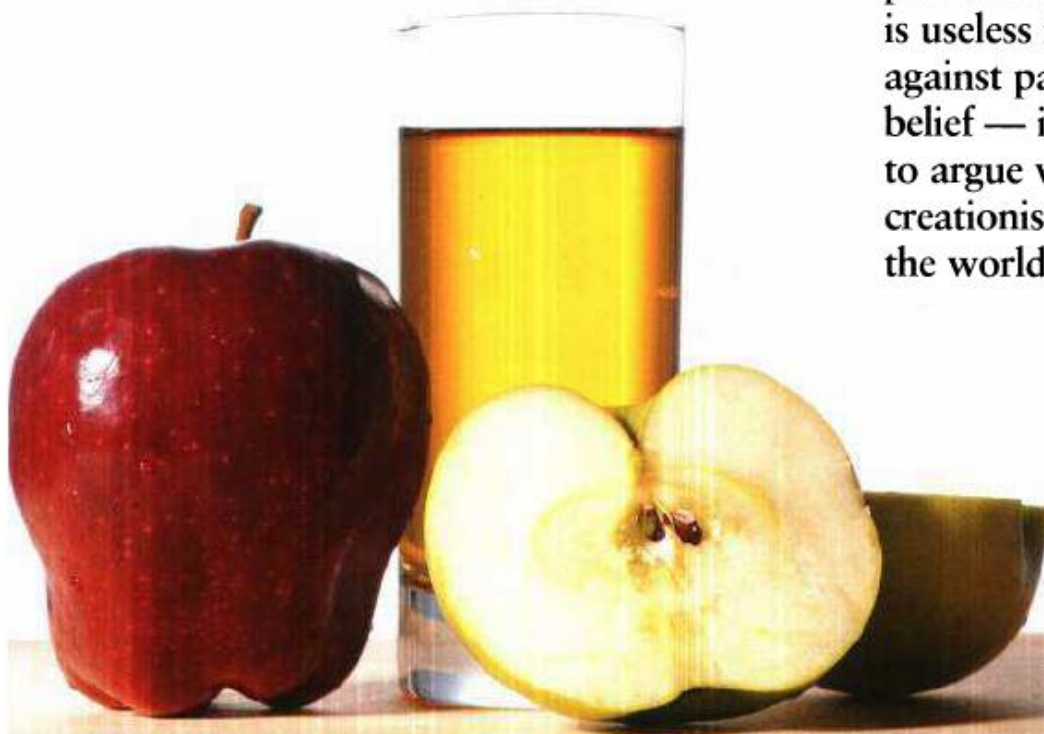
fruit, the high price automatically limits consumption for more people. Cheap 2L, 3L or 4L containers of juice easily lead to over-consumption and are best avoided.

However, in the average Australian diet, excess fruit itself is rarely a problem. The last national nutrition survey found consumption of fruit (as fruit, not juice) averaged a little less than one serve a day and contributed to just more than 3.5% of energy. The more

cont'd next page

I have no hesitation in classing most apple juices as little more than cordial with added vitamin C.

Trying to argue on the basis of evidence from large, well-conducted studies reported in peer-reviewed journals is useless if you're up against passionate belief — it's like trying to argue with a creationist over how the world began.



from previous page

recent Australian National Children's Nutrition and Physical Activity Survey (2007) reported low fruit consumption among children. Among 14-16-year-olds, only 1% achieved the daily recommended 1-3 servings of fruit (excluding juice).

Few Australians actually follow the dietary guidelines to consume two serves of fruit a day. (A serve is equivalent to 150g or a medium orange, apple, pear or banana or two small apricots, kiwifruit or plums.)

As for weight and fruit, many studies confirm that a higher intake of fruit may reduce long-term risk of weight gain.^{1,2} That is, increasing fruit consumption, obviously within limits, is also related to weight loss.^{3,5}

Total sugar consumption in Australia comes mainly from added sugars in foods, but also includes the sugar occurring naturally in foods such as fruit, some vegetables and milk. These foods also contribute to our nutrient intake, with fruits being a valuable source of dietary fibre (much of it as soluble fibre), folate and other vitamins.

The WHO recommends added sugars should contribute just 10% of energy intake, much less than what Australians currently consume. Among children, almost 80% of 2-3-year-olds, over 70% of 4-8-year olds, 67% of 9-13-year-olds and over 60% of 14-16-year-olds get more than 20% of their energy from sugars. However, only a tiny proportion of this sugar comes from fruit.

My advice to GPs would be to direct dietary advice to reducing the nutrient-poor, energy-dense (junk) foods and drinks that dominate the diet.

Foods such as sugar-sweetened drinks, high-sugar/high-fat foods such as confectionery, biscuits, cakes, pastries, desserts and high-fat foods (snacks, fast foods, chips, fried foods) contribute over a third of average energy intake. We would be much better off without their saturated and trans fats, salt and added sugars.

By contrast, reducing our already low fruit consumption would be worse than useless. Fruit is a healthy, filling food. Its dietary fibre slows down the rate at which the naturally occurring sugars in fruit enter the bloodstream. Fruit does not deserve condemnation.

The occasional overweight individual may consume four or more pieces of fruit a day, but it's unlikely that is the sole cause of their excess weight. I would recommend water (or, for adults, tea or coffee) in place of juice, but if someone reduces their fruit intake, always check what they would use as a replacement for fruit. The chances are that it would be less healthy and have more kilojoules than a piece of fruit. Perhaps more exercise would be appropriate.

Keep taking supplements?

When evidence emerged recently from several long-term studies indicating possible harm (albeit small) from supplements of vitamins and some minerals, the media publicised the findings even though they were unfavourable to some potential advertisers.

Antagonism from supplement sellers was to be expected, but much of it occurred in online discussion forums where testimonials claiming super physical health, appearance or performance flowed freely. To be fair, some contributors also argued a healthy diet was a better (and cheaper) alternative.

Body builders also weighed in on the argument, seeing it as an opportunity to promote protein shakes, powders and power bars. Most of their claims relied on belief and personal anecdote — regarded as 'evidence' by many users of these products.

The dietary supplement story continued with extra traction from the Pharmacy Guild of Australia's alliance with a supplement maker (cancelled after negative publicity) to match specific supplements to patients' prescription medication.

Some of those who believe in supplements dispute studies which question their benefits on the basis

that the wrong mix, the wrong quantity, or even the wrong brand of vitamins were used. Others cherry-pick the evidence to quote results that favour use.

There are times when supplements are necessary, but most Australians would be better off improving their diet than trying to correct poor eating habits with supplements — no supplement can undo the effects of trans fat, saturated fat, too much alcohol, sugar and salt.

When confronted with arguments on supplements or any other nutrition-related issue, internet access makes it fairly easy to seek out valid references. Although this takes time, it's worth noting many of the references quoted by supplement devotees turn out to be opinion pieces, hypotheses and letters to journals rather than randomised controlled trials or systematic, or even balanced, reviews.

However, checking references takes more hours than some time-

poor GPs may have. So how can GPs respond to patient questions about dietary supplements?

Some avoid confrontation by recommending a multivitamin as a safe option, on the grounds the quantities of its components are unlikely to be harmful. The latest studies (and some previous ones) may invalidate that idea.^{6,7} However, in many cases, trying to argue on the basis of evidence from large, well-conducted studies reported in peer-reviewed journals is useless if you're up against passionate belief — it's like trying to argue with a creationist over the how the world began.

The local gym and some natur-
opaths may also be ardent supporters of supplements.

My fallback position is to state the latest findings, explain the risks reported were modest (although dietary supplementation with vitamin E was found to significantly increase the risk of prostate cancer among healthy men) and recommend food sources of the nutrients that the individual believes may be lacking in their diet.⁷ If the whole

diet improves, that's a bonus.

I also ask patients to be aware of possible conflicts of interest. Does the fitness instructor, the local gym or the naturopath sell supplements? If so, I point out they may be less likely to give an unbiased viewpoint. In the end, however, we can only point patients in the right direction. Some unbiased information is available from Nutrition Australia (www.nutritionaustralia.org), Choice (www.choice.com.au) and state and federal health departments (see for example, www.healthinsite.gov.au).

Low-protein diets cause weight gain?

The argument over the ratio of carbohydrates, fats and protein in an ideal diet is not new. For reasons I don't understand, celebrities are seen as nutrition experts and any diet they promote is headed for the bestseller list. Lots of media publicity then ensures success.

In fact, we eat foods rather than protein, but it's the stories about nutrients that attract media publicity — and distortion. This was evident with the CSIRO's studies, which pitted two low-fat diets against each other.

One was higher in carbohydrate and the other had more protein. Although in all the studies using variations on these diets, weight loss has been the same in both

groups, media coverage continues to hype the value of high protein in weight loss.

The latest push for protein came from an interesting, but small Sydney study involving just 22 lean, healthy individuals. The subjects were housed at a university campus and given one of three menus over a four-day period. The foods varied only in their protein content; subjects could eat as much as they liked.

The protein levels were 10%, 15% or 25% of energy intake. The results showed that the subjects on the 10% energy from protein diet consumed 12% more kilojoules over the four days than those on the foods that supplied 15% of the energy as protein.

Snacks provided 70% of the increased energy intake. There was no increase in snacking or energy intake when the protein rose to 25% of energy intake.

This is an interesting study, but some context is needed. It was small (22 people) and extremely short (just four days) and it is not valid to use its findings to push for an increased intake of protein.

Australians' mean protein intake contributes 17% of energy, so we're already in the right zone according to this study — which also showed no increased snacking at their 25% energy from protein level.

Research that helps us understand various aspects of weight gain is obviously important. But the distortion and extrapolation that so often accompanies media reports is not helpful. In this instance, body builders and high-protein enthusiasts used this tiny study to push their barrow.

As those who have tried to dissuade a bodybuilder from their devotion to superfluous quantities of protein powders know, reason and logic are no match for a belief system based on loyalty to a product, company or a personality that spruiks the products.

In the field of nutrition and diet, common sense is often in short supply. It may help to remind patients that if something seems too good to be true, it probably is. ●

Dr Stanton (PhD Hons)
is a leading nutritionist.

References

1. *Obesity* 2008; 16:664-70.
2. *Obesity Reviews* 2009; 10:639-47.
3. *Asia Pacific Journal of Clinical Nutrition* 2003; 12 Suppl:S10.
4. *International Journal of Obesity and Related Metabolic Disorders* 2004; 28:1569-74.
5. *Plant Foods for Human Nutrition* 2005; 60:219-24.
6. *Archives of Internal Medicine* 2011; 171:1625-33.
7. *Journal of the American Medical Association* 2011; 306:1549-56.