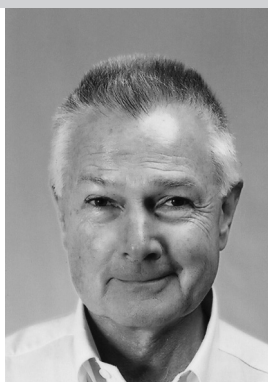


# METABOLIC SYNDROME: ROLES OF THE INDIVIDUAL, SOCIETY AND THE FOOD INDUSTRY

*The concurrence of the features of the metabolic syndrome has been recognised for some eight decades, but only since about 1988 has this syndrome and its consequences gained sharper focus and definition.*



## **JOHN L STRAUGHAN**

*BSc (Pharm), MB ChB, BSc (Hon)  
(Pharmacol), Dip Clin Pharmacol, FPS,  
MFPM (RCP)*

### **Ad hoc Lecturer**

*Department of Medicine  
Division of Pharmacology  
University of Cape Town*

### **Contract Medical Consultant**

*Pfizer South Africa  
Cape Town*

*John Straughan practised as a pharmacist before qualifying as a medical doctor. He held academic posts at the universities of Stellenbosch and Cape Town and was the editor and assistant editor of the South African Medicines Formulary. John is currently a contributor to the Formulary. He has a special interest in health and nutrition, psychopharmacology and cardiovascular medicine.*

Despite extensive exposure in the educational medical media, far too many health care practitioners, and even more so medical aids, still approach the management of the metabolic syndrome in a fragmentary way, and thus make little impact on the morbidity and mortality of individuals with this condition. The public get virtually no exposure to the concept of a pandemic of the metabolic syndrome and its dire consequences, nor of its financial ravages for the individual, family, and nation as a whole. In general, people in our country have no conception of such a pandemic, and allow the problem to grow – literally and figuratively.

The food industry is principally concerned with economic rewards and continues to pour into formal and informal food outlets a vast and increasing supply of very tempting, extensively advertised, attractively and often extremely expensively presented, undesirable foodstuff and beverages.

Government departments with the duty of caring for the health of the nation seem to operate as though there is no such disaster afoot. Meanwhile this sinister syndrome is seriously and progressively undermining the health and the health bill of the nation.

The cardinal diagnostic features of the metabolic syndrome are overweight/obesity, hypertension, dysglycaemia and dyslipidaemia. These features are readily discerned and quantified, leaving no excuse for health care professionals not to tackle the syndrome comprehensively and circumspectly. However, their impact on this syndrome is rather small. It is, nevertheless, their responsibility to agitate for rational and urgent remedial approaches to this pandemic by medical aids and by local and central health departments.

The national media need to give far more educational attention to this pandemic – and so help to inform the nation of its presence, its consequences, and of the means available to combat it. The media will of course have to be prepared to combat many of the disincentives and rebuttals of the food industry – not least their financial clout. The ready availability of a huge variety of undesirable food and drink should be the concern of every one of us.

We need to examine very consciously what we, and, very importantly, what our children are eating and drinking. It should not come as a surprise to find that many items in our daily diets not only constitute poor nutrition, but also are decidedly deleterious to health. These items range from widely and cogently advertised foods such as breakfast cereals, crisps/chips (the array is staggering), spreads, cooking fats, burgers, sausages and take-outs, through to sugar-laden colas, sodas and 'fruit' drinks. For millions of people these are their staples, particularly for those with little money.

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A food item is undesirable if:

- it is energy dense, nutrient low, or has a high glycaemic index
- it has a high fat content (often loaded with atherogenic trans- and saturated fatty acids – especially in the context of the metabolic syndrome)
- it contains minimal fibre
- it contains too much salt
- it has too many preservatives
- it has a poor vitamin and mineral content.

If these food items constitute a major source of daily dietary intake, the restricted variety is also highly undesirable.

For the more financially affluent who frequent restaurants and fast-food outlets, the portions served grow ever larger, and so do many of their patrons. The size and appetising nature of servings are real factors in provoking greater intake, and an impressive number of excellent studies attest to these facts. And who cannot but note the unhealthy physical proportions of so many of the prominent figures in our nation – ‘role models’ who unwittingly but surreptitiously send out a message that ‘big is okay’. This against a counter culture of the desperately underweight, and both parties may be regarded as demonstrating eating disorders that are disastrous for health.

Overweight/obesity are major determinants of the metabolic derange-

ments that are part and parcel of the metabolic syndrome. Overweight/obesity provokes insulin resistance, also shifting the person into an inflammatory state, where many of the markers of inflammation are elevated. Such an inflammatory state invites a multitude of pathologies to gain a foothold; apart from the immediately obvious cardiovascular, cerebrovascular and diabetes repercussions, a host of other disorders are likely to emerge – such as hepatosteatorosis, cancers, benign prostatic hyperplasia, arthropathies, susceptibility to a variety of infections, depression, headaches and possibly an increased risk of dementia.

We live in a culture that encourages physical inactivity. Many of us have to spend long hours sitting at desks, but then go home to spend several more hours in front of the television – accompanied too often by a snack meal which may have all or many of the characteristics of the undesirables mentioned above. Our nation has been characterised as sport mad, but the sad proviso for too many is that the sport must be played out on the television screen for the passive enthusiasts.

We need to know, and to be sold the idea time and again, that physical activity is essential for health. In the context of the metabolic syndrome, physical activity is a cheap and magical remedy – improving every aspect of the syndrome, from overweight, insulin resistance, generalised inflammation, dysglycaemia, to dyslipidaemia, and having mental and psychological benefits.

Very late in the day the USA, for example, is rightly worried about the size of the individuals in its society – more than 50% of its population is overweight. The USA has a vast food industry that is pampered by the federal and local governments and is extremely wealthy. Likewise, overweight is very prevalent in our nation, and as more people from the rural

areas move to the towns and cities they rapidly add to the problem.

The fast-food industry in South Africa is at least as popular as it is in the USA. The vending machines in offices, cafés, pharmacies, hospital foyers, and hotels are laden with undesirable items that so many people ingest day after day. The trolleys that good, charitable volunteers push around the wards of some of our hospitals are the bearers of ill-health, and with their present cargo should be banned. Even the refreshment shops in hospitals provide undesirable food, so encouraging unhealthy eating habits.

In conclusion, the metabolic syndrome may be as serious as HIV in some sections of society and is also highly preventable. Treatment is possible, but expensive – prevention is by far the better option. GPs and other health care professionals need to do all in their power to promote healthy lifestyles.

### **IN A NUTSHELL**

Unhealthy foods are widely sold.

Overweight / obesity is pandemic.

Metabolic syndrome as a major consequence is rampant.

Hypertension, dyslipidaemia and dysglycaemia are readily measurable metabolic syndrome identifiers.

High levels of morbidity and mortality ensue.

Costs to the nation's health and to the national health bill are enormous.

The fast-food industry plays a huge role by providing unhealthy food and drink.

Growing numbers of prominent persons display obesity – providing poor role models.

The challenges – educational, preventive and management – are great, both for the public and private sectors.