

The prevention of  
common chronic conditions

and the promotion of  
health and well-being

Strategies for doctors  
and nurses

Tough on crime and tough on  
the causes of crime\*

This applies also to the prevention  
of common chronic conditions

Remove, reduce or redress not only  
the risk factors but also their causes

Address the chain of causality

Avoid victim-bashing

\* UK labour party slogan

# Common chronic conditions have interacting\* causes in common

- wrong eating pattern
- dangerous habits
- risky medications
- socio-economic and personal stress

remove causes to prevent conditions

prevent one - prevent ALL [almost]

\* re-enforcing and determining presence and extent [ping-pong]

# Wrong eating pattern

- 1 or 2 large meals per day
- high calorie intake [more than needed]
- low intake of starches\* and legumes
- low vegetable intake
- high intake of sugary, salty packaged food
- high meat and fat intake
- liberal use of sugars and salt
- frying, roasting and charring food

\* as in bread, pasta, rice, maize, oats, mabela, potato, barley, millet, sago, yams, plantain, couscous, ...

# Dangerous habits

- smoking tobacco
- chewing or sniffing tobacco
- inhaling tobacco smoke
- alcohol abuse [ $> 2$  drinks/day]
- binge drinking
- no regular physical activity
- all work, no play

# Risky medications

- sympathicomimetics
- NSAIDs
- steroids
- high dose diuretics
- high dose  $\beta$ -blockers without ISA
- medicines containing XS sodium

# Socio-economic and personal stress

- poverty and unemployment
- dysfunctional family life
- powerlessness and lack of control
- homelessness or inadequate housing
- stressful working conditions
- poor education and lack of skills
- social isolation and loneliness

# Impact of the causes

- obesity
- dental caries
- dyspepsia
- hypertension
- diabetes
- high LDL and low HDL
- COPD
- alcoholic GIT disease
- alcoholic CNS disease
- cancers
- osteoporosis
- hiatus hernia
- varicose veins
- osteo-arthritis
- heart failure
- IHD
- stroke
- impaired vision
- renal failure
- PVD
- immune deficiency
- fractures

# The end result

- aggravation of causes and effects
- frequent falls and injuries
- repeated infections
- disability and depression
- dependence on doctors and medicines
- job loss, social isolation and poverty
- incapacity, frailty and dementia
- premature death

# Recommended strategies for doctors and nurses

to be incorporated into routine care  
no opportunity should be missed

- **assess:** current health/disease status  
presence and extent of risk factors
- **intervene:** inform, motivate, negotiate goals
- **follow-up:** monitor, support and re-inforce
- **refer prn:** laterally and vertically  
with continuity of care in a family practice



# How to help patients eat well

- take a diet and eating history
- outline the components of a good diet
- negotiate and personalise recommendations
- supply written material if wanted
- monitor change and discuss difficulties
- provide support and reinforce advice
- encourage patients to share their knowledge with family, friends and colleagues
- refer for professional assistance prn

for all but especially for those at high risk

# general dietary considerations

- varied [to supplement and complement nutrients]
- balanced between nutrient groups
- balanced within each meal or snack
- adequate to meet need [age, habitus, activity] \*
- enough - not too little nor too much
- culturally acceptable and feasible
- in season, available, accessible and affordable
- correctly prepared, tasty, fresh, clean and edible\*
- minimally salted, unsweetened and unrefined
- suitable for the whole family and all disease states

\* soft/pureed, low bulk and high calorie diet for infants and the edentulous, frail aged

# Match energy requirements to body build and activity

body build	level of physical inactivity				
	0	1	2	3	4
very obese	30	25	20	17.5	15
overweight	35	30	25	20	17.5
normal	40	35	30	25	20
thin	45	40	35	30	25

calories/kg IBM per day

# general dietary recommendations

Eat a mixed diet of various starches, legumes, fruit and vegetables, fat-free dairy products and fish

- Starches or complex carbohydrates as in wheat, rye, rice, barley, oats, sorghum, maize/corn, millet, potatoes, yams and dry legumes should supply more than half of the calories of each meal and snack
- Protein should be obtained from grains, legumes, fish, fat-free dairy products and starchy vegetables; use meat as a treat or flavour
- When whole grains, fish, dry legumes and nuts, all of which contain essential fatty acids are not available, a little oil should be added
- Vitamins, minerals and roughage should be obtained from vegetables, grains, legumes, nuts, fish, fruit and fat-free dairy products

Drink at least 3 glasses of water daily

# An eating programme for all ages

- nibble, don't gorge
  - =/> 5 small\* meals or snacks per day not =/< 3 interval between eating to be < 4 hours
  - if hungry eat again soon rather than more now
- more for breakfast and less for supper
  - more calories before exercise or work
  - and less before rest or sleep
- make each meal or snack an occasion
  - sit down formally with family, friends or colleagues
  - in pleasant, quiet and un-polluted surroundings
  - eat slowly, chew thoroughly and enjoy.

\* size refers to energy content - not to food mass or volume

# What not to eat or drink

it is necessary to know that it is wrong to eat the following - except occasionally

- empty calories such as sugars [sucrose, fructose, ... ]
- food to which a sugar has been added
- foods to which sodium [usually NaCl] has been added
- animal fat as in butter, cream, fatty meats
- food containing saturated\* trans, or hydrogenated fats

check the labels of packaged food for sodium, sugars and modified fats

\* Infants and young children excluded; they should have an adequate saturated fat intake

# Food with an added sugar

[sucrose, glucose, fructose, dextrose, sorbitol, xylitol]

- jam, honey, syrup, sweets
- pudding, ice-cream, stewed and glazed fruit
- cakes, biscuits, buns, crackers
- colas, other cold-drinks, instant mixed coffees
- chocolate and tonic drinks, shop magewu
- sweetened condensed milk
- other sweetened and flavoured milk products
- most precooked breakfast cereals.

**Check the labels on packaged food for “hidden” sugars”**

# Food high in sodium

[usually sodium chloride - table salt]

- salty snacks, crisps, pickles
- commercially blended spices
- spreads, sauces, chutneys, atchas
- many cheeses and mayonnaise
- bacon, sausages, polony
- other smoked meats or fish
- most tinned foods, dehydrated soups
- vegetables soaked in salt water before cooking

# Food containing saturated, hydrogenated or trans fatty acids

- cream, butter, ghee, egg yolk
- full-cream milk, full-cream milk products
- lard, suet, beef and mutton fat, schmaltz
- roasted or fried meat
- all margarines
- non-dairy creamers and milk blends
- most processed and packaged foods

It is necessary to check the labels on all packaged food  
[trans fatty acids often called partially hydrogenated oil in SA]

# Items for a food check list

- number of meals/day
- number of times vegetables eaten per day
- number of times dried legumes eaten per week
- number of times meat eaten per week
- type of dairy products usually used [full-cream, low-fat, fat-free]
- type of fat/oil usually used [butter, margarine, lard, pure vegetable oil]
- number of times fruit eaten per day
- number of fruit juices and cold-drinks drunk per day
- number of cookies, biscuits, pastries or slices of cake eaten per week
- number of packaged and fast foods or take-aways eaten per week
- number of teaspoons of sugar used per cup of tea or coffee per day
- amount of salt added in cooking and at the table [use 5-point scale]

To be customised per patient and completed at every visit

# Tobacco use and alcohol abuse\*

## how to prevent your patients from starting

- be a good role model
- encourage role models, teachers, parents and significant others to set a good example
- build self-confidence to resist peer pressure
- encourage recreational and cultural pursuits
- remove adverts from waiting areas
- display supportive material and posters

\* adults >2 units/day, children any amount, binge drinking

# How to help your patients stop using tobacco or abusing alcohol

- take a detailed tobacco and alcohol history
- inform patients why they personally should stop
- discuss with them how to stop
- supply them with written material if wanted
- monitor change and reinforce messages
- provide support to reduce [before and after] stress
- enlist the help of family, friends and colleagues
- refer for professional assistance prn
- prescribe anti-craving medication or Antabuse prn

# Useful self-help material\* for empowerment

- testimonials of successful quitting
- effects of tobacco use and alcohol abuse
- methods, guidelines and tips on how to stop
- clear details on where to find help
- contract forms

\* accessible to patients in waiting area/s and for taking away

# Everybody can and should be physically active all their lives

no need to attend a gym, to jog or lift weights

no need to "work up sweat" - also not sustainable

low levels of regular routine activity are beneficial

- cleaning the house, gardening, mowing the lawn
- walking up and down stairs and to and from shops
- playing ball, walking and cycling with the family
- dancing and racquet sports
- in-door, regular callisthenics and physical jerks

encourage work-related physical activity

limit time children spend with TVs and computers

# Strategies to increase physical activity

- take a detailed history
- discuss a personalised programme
- supply written material on why and how
- monitor compliance
- encourage and compliment
- reinforce and motivate
- refer to group activity programmes

# How to reduce the need for risky medications

teach patients to how to prevent  
and when present how to treat  
without drugs

- obesity
- musculo-skeletal distress syndromes
- urinary tract infections
- upper respiratory tract infections
- dyspepsia

use safer alternative medications  
use lowest effective doses

# Strategies to reduce stress

enquire about stress

- ask and listen -

assure patients that compliance  
with the other strategies would help  
them cope better with stress

advise and refer as appropriate

# A short message

- enjoy small, frequent meals or snacks
- eat mainly starches, legumes and vegetables
- use meat as a flavour, garnish or treat
- use little or no sugar, salt, fat and "junk" foods
- drink at least 3 glasses of water per day
- avoid tobacco in all forms and shapes
- drink < 3 alcohol drinks/day - with meals
- walk whenever and wherever possible
- stretch, straighten and strengthen
- set limits and good examples for children

# Spin-offs from all this

for the care provider:

- lower disease load/patient without fewer patients
- higher cure and control rates
- satisfied loyal patients

for the patient:

- lower risk of becoming ill
- fewer drugs, fewer and smaller medical bills
- physical fitness and restful sleep
- self-confidence, self-respect and self-control
- a healthy, happy and non-dysfunctional family

for society:

- ecological sustainability and survival

# No man is an island

The recommendations apply to everybody and should be accepted as norms by society young and old; fat and thin; sick and healthy

Everybody should be encouraged to adopt the whole package for life and to share it with others

## HOWEVER

- implementing only some of the components also helps
- the whole is more than the sum of its parts
- benefits accrue over time

People must have the knowledge and the resources to make healthy choices