Information about

# No Added Salt Diet

For advanced liver disease

# Rationale

A common complication of advanced liver disease is the build-up of excessive fluid, particularly around the stomach area (ascites) and in the feet and legs (oedema).

Restriction of the intake of salt (sodium chloride) is an extremely important part of the management of this fluid retention.

Salt acts like a sponge with fluid in your body. By reducing the amount of salt you eat, as well as increasing your protein intake, you can reduce the amount of fluid that stays in your body.

You may also be asked to limit the amount of fluids you drink through the day. This includes all beverages and watery foods such as soup. Half of your fluid intake should be high in protein (e.g. milk).

Be aware that the sodium level on your blood tests does not reflect the total amount of salt (sodium) in your body. If you have fluid build-up then you have too much salt in your body.

For healthy adult Australians, the National Health and Medical Research Council (NHMRC) recommends that dietary sodium intake be less than 2,300mg of sodium per day.

To help control fluid retention in liver disease, aim to have less than 2,300mg of sodium each day.

The most effective way to achieve this recommendation is to follow a 'No Added Salt' diet.



An information leaflet for patients and interested members of the general public prepared by the Digestive Health Foundation

# THIRD EDITION 2012

Reviewed by: Joanne Heyman PhD, APD, RD (USA) Liver Clinic Dietitian, Dept of Nutrition & Dietetics, Royal Prince Alfred Hospital, NSW Helen Vidot APD

Liver Disease and Transplantation Dietitian Royal Prince Alfred Hospital, NSW

# What is salt?

The table salt and cooking salt we generally have in our kitchens is made up of sodium chloride. It's the sodium we need to watch out for.

# Salt in common foods

Most Australians eat a lot more salt than we need. Salt is added to foods for flavour and also as a preservative. Sodium also occurs naturally in almost all foods and can be present in processed foods through food additives (e.g. sodium bicarbonate in cakes and biscuits).

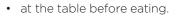
Foods that contribute the most to Australians' salt consumption are salty breads and bread rolls, processed meats, canned vegetables, instant pastas/soups, salty biscuits and pizza. Sauces, spreads and condiments can also be surprisingly high in salt.

# What is a No Added Salt diet?

Plenty of salt is found naturally in food, or added to processed foods, so we certainly don't need to add salt to cooking or meals.

# No Added Salt means DO NOT ADD SALT:

• while preparing or cooking food; or



A fondness for salty foods is something we learn over time. Initially you may notice that food tastes 'different' after starting a

**No Added Salt diet**. However, your tastebuds will adapt to this healthy dietary change.

#### Salt is not the only way to add flavour, instead add:

- Freshly ground black pepper
- Lemon, lime and citrus fruits, vinegar, particularly balsamic vinegar
- Oil or butter
- Fresh herbs
- Chillies
- Ginger, garlic, shallots and spring onions
- Spices such as mustard powder, nutmeg, cinnamon, cardamom, ginger, cumin
- Toasted and ground sesame seeds

# Additional tips

## 1. Be a salt sleuth

When grocery shopping, look at the sodium content on the food and nutrition information panel. Salt is shown as 'sodium' on food labels. The total sodium content of packaged foods (including naturally occurring sodium, sodium from additives and added salt) must be declared on the Nutrition Information Panel on the food label.

### 2. Understand food claims

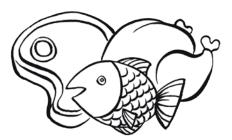
Claim	What does it mean?	Comment
'No Added Salt'	This means that extra salt is not added to the product, however the product may still contain a high level of its own natural salts	Worth considering – check overall salt content
'Salt Reduced'	Foods contain no more that 75% salt of the equivalent products, thus may still be fairly high in salts	Misleading – check overall salt content
'Low Salt'	Foods contain no more that 50% salt content of the equivalent products	Worth considering

- **3. Cut back on highly salted foods and condiments** Foods that have been prepared or cooked commercially with salt also need to be avoided. See below for a list of foods to include in your diet, and foods to avoid.
- 4. The use of 'salt substitutes' is not recommended Salt substitutes usually contain potassium and their use may lead to very high potassium levels in the blood that can alter your heart rhythm and lead to heart problems.



# Eat high protein foods

A combined no added salt, high protein diet is important for people with chronic liver disease. The protein is used to maintain muscles, body tissues and to the keep the body working normally.



	Foods to include	
HIGH PROTEIN FOODS	<ul> <li>Meat, poultry, fish, seafood (fresh or frozen)</li> </ul>	•
Meat, Fish, Poultry, Eggs, Tofu, Legumes,	<ul> <li>Eggs</li> <li>Seafood canned in oil or springwater</li> </ul>	
Nuts and Seeds	<ul> <li>Fresh tofu or bean curd</li> </ul>	•
Include in each meal/ snack	<ul> <li>Fresh or dried Legumes (lentils, chickpeas, soybeans, kidney beans), no added salt baked beans</li> </ul>	•
	<ul> <li>Unsalted nuts and seeds</li> </ul>	

	oods to avoid
•	Cured, smoked,
	canned or salted
	meat (e.g. cornec
	beef, ham, bacon
	sausages, salami,
	brawn, frankfurts

- hot dogs, pate)
  Meat pies, sausage rolls, fish fingers and other salty takeaway foods (e.g. BBQ chicken, Asian meals etc.)
- Salted, smoked or pickled fish (e.g. anchovies, smoked oysters, pickled herring etc.)
- Seafood not canned in springwater or oil
- Canned legumes such as kidney beans, three bean mix, regular baked beans
- All salted nuts and seeds





#### Foods to includ

• Milk

Yoghurt

 Cream, sour cream

• Custard,

dairy desserts,

cheddar cheese

(e.g. Nimbin\*)

Other cheeses

120g/day

• Multigrain,

wholemeal, rye,

white, Lebanese,

ice-cream

Ricotta or cottage cheese (see label)
Low sodium

#### Foods to avoid

- Commercial cheese dips
- Cheese logs
- Cheese biscuits or breads
- Commercial
   cheese sauces

Bread, Cereal, Rice, Pasta and Noodles

HIGH

PROTEIN

Dairy or Soy

Include in

snack

each meal/

FOODS

Enjoy in moderation with high protein foods listed above

 English muffins, crumpets, pikelets, waffles, pancakes

Turkish, flat

bread, and

bread rolls

- Fruit bread and buns
- Cakes, sweet biscuits, pastries
- Plain savoury biscuits without salty toppings
- Breakfast cereals (compare brands for the lowest sodium content)
- Rolled oats, porridge
- Rice
- Fresh and dried pasta or noodles
- Unsalted popcorn and pretzels

- Savoury breads, bread, bread rolls with salty ingredients (e.g. bacon, Vegemite<sup>\*</sup>, olives, sun-dried tomatoes etc.)
- Savoury crackers sprinkled with salt (e.g. Jatz\*, Shapes\*, Saltines\* etc.)
- Packet rice, pasta, instant noodles with flavour pack
- Canned spaghetti
- Takeaway Asian noodles with salty condiments
- Salty snack foods (e.g. pretzels, potato crisps, corn chips, Cheezels<sup>®</sup>, popcorn etc.)



	Foods to include	Foods to avoid
Vegetables Enjoy with high protein foods listed above	<ul> <li>Fresh and frozen vegetables</li> <li>'No added salt' canned vegetables</li> </ul>	<ul> <li>Pickled or preserved vegetables (e.g. kimchee, gherkins, olives, capers etc.)</li> <li>Salty, canned vegetables</li> <li>Tomato or vegetable juice</li> </ul>



	Foods to include	Foods to avoid
Fruit	Fresh fruit	• None
Enjoy in	Dried fruit	
moderation	<ul> <li>Fresh juices</li> </ul>	
with high		
protein foods		
listed above		



#### ods to include 🔰 F

 Salt-reduced stock or stock powder

Soups and

broths

Avoid if

asked by

your doctor

to limit the

amount of

fluid you

consume,

casseroles

and try

instead

- Gravy made with salt-reduced stock
- Homemade, unsalted soups
- All canned or dehydrated packet soups
- Restaurant/café/ takeaway soups
- Stock cubes and powder
- Commercial gravy
- Dashi, miso and soups made from them
- Bonox®

• Salty spice

mixtures

• MSG

• Rock salt

sauces

sauce

sauce

• Miso, dashi

Dried packet

(e.g. lemon

pepper, celery

salt, veggie salt)

• Soy, oyster, hoisin,

teriyaki, black

bean and fish

Worcestershire<sup>®</sup>



#### Foods to inc

#### to include

Condiments Add flavour to your meals and snacks

- Herbs and spices with no added salt
- Vinegar, lemon or lime juice
- Mustard, chillies, garlic, ginger
- No added salt peanut butter for satay sauce
- Salt reduced soy sauce (in moderation)
- Oil
- No added salt butter/margarine
- Gravy
- Regular satay sauce
- Vegemite<sup>\*</sup>, Marmite<sup>\*</sup>, Bonox<sup>\*</sup>



	Foods to include	Foods to avoid
Drinks and extras	<ul> <li>Drink milk or soy milk to provide extra protein!</li> <li>Water</li> <li>Cordial, soft drink</li> <li>Hot chocolate, tea, coffee</li> <li>Lollies and chocolate</li> </ul>	<ul> <li>Sports drinks and electrolyte drinks</li> <li>Shop purchased tomato juice, vegetable juice</li> <li>Clear aspirin or effervescent drinks like alka-seltzer*, Eno*, and vitamins like Berocca*</li> <li>Some lollies/ sweets (licorice, sour lollies honeycomb)</li> </ul>

# Further information about following a No Added Salt diet

The above list of foods is intended as a general guide only. An accredited dietitian will provide specific advice for you and design an eating and shopping plan which makes it easy to follow a No Added Salt Diet.

## Take home points

To reduce fluid retention:

- Reduce your salt intake and increase your protein intake
- Do not add salt while preparing/cooking food or to your meal
- Read food labels and compare sodium content between similar products
- Choose low salt (sodium) foods

#### **Digestive Health Foundation**

This information leaflet has been designed by the Digestive Health Foundation (DHF) as an aid to people who have been recommended this diet for fluid retention in advanced liver disease or for those who wish to know more about it. This is not meant to replace individualised advice from your medical practitioner.

The DHF is an educational body committed to promoting better health for all Australians by promoting education and community health programs related to the digestive system.

The DHF is the educational arm of the Gastroenterological Society of Australia (GESA), the professional body representing the specialty of gastrointestinal and liver disease. Members of the Society are drawn from physicians, surgeons, scientists and other medical specialties with an interest in gastrointestinal (GI) disorders. GI disorders are the most common health-related problems affecting the community.

Research and education into gastrointestinal disease are essential to contain the effects of these disorders on all Australians.

Further information on a wide variety of gastrointestinal conditions is available on our website - www.gesa.org.au



#### **Digestive Health Foundation**

c/- GESA PO Box 508, Mulgrave VIC 3170, Australia **Telephone:** 1300 766 176 **Facsimile:** (03) 9802 853 **www.gesa.org.au**  \*Copyright: Digestive Health Foundation September 2012 🐨 32066

his leaflet is promoted as a public service by the Digestive lealth Foundation. It cannot be comprehensive and is intended is a guide only. The information given here is current at the time of printing but may change in the future.