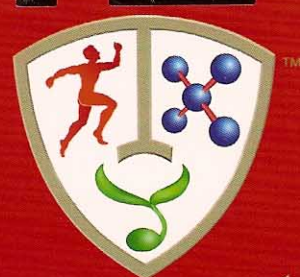


OPTIMUM NUTRITION

SPRING 2009
£3.30

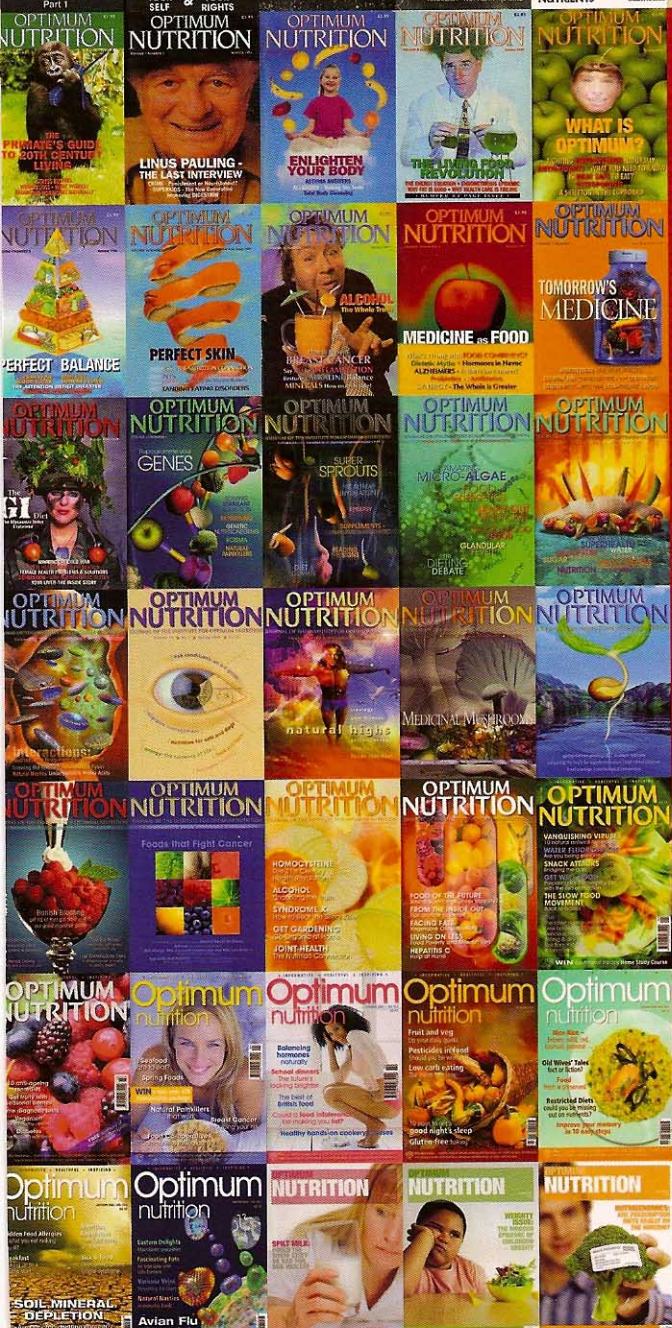


CELEBRATING 25 YEARS



OF THE
INSTITUTE
FOR
OPTIMUM
NUTRITION

1984-2009



**NUTRITION NEWS * SARAH STOREY * FOCUS ON EGGS
* ION CONFERENCE & AWARDS CEREMONY PREVIEW *
FIVE-A-DAY DEBATE * BODY PARTS * GROW YOUR OWN
* EXAMINING THE THEORY BEHIND THE NO-GRAIN DIET *
RECIPES * THE MENOPAUSE * SCHOOL FOOD UPDATE**

ISSN 1457-5876



09 >

THE PANCREAS

A closer look at this hormone and enzyme-producing organ

The pancreas is a fish-shaped spongy, grey-pink organ about 12.5cm long, stretching across the back of the abdomen, behind the stomach.¹

The head of the pancreas on the right side of the abdomen is connected to the duodenum. The narrow end of the pancreas, called the tail, extends to the left side of the body.²

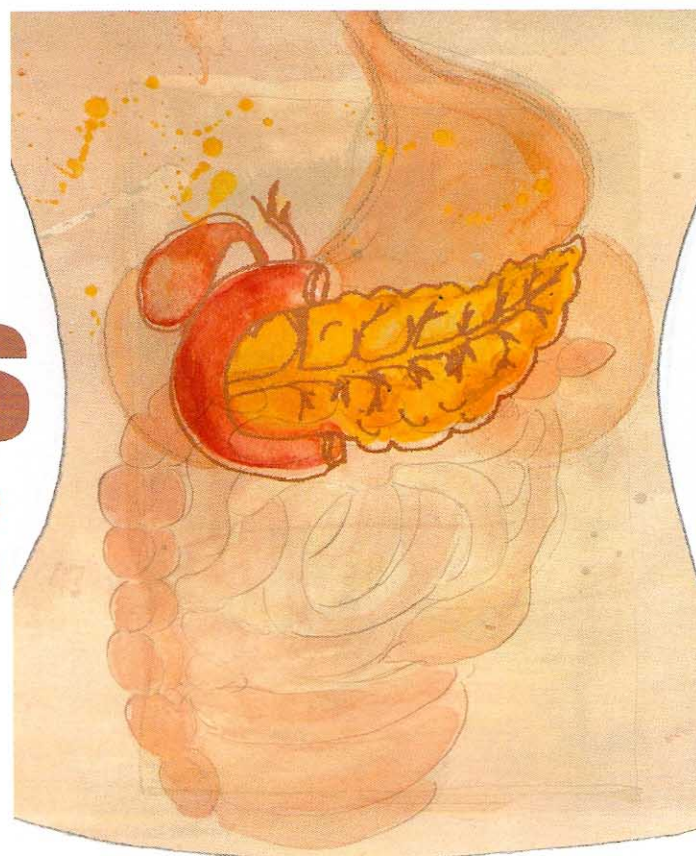
It has two functions: producing the enzymes needed to digest food (exocrine) and producing hormones, including insulin (endocrine).

The pancreas secretes several digestive enzymes that in turn digest fats and proteins in the food.³

Not only critical for proper digestion, pancreatic enzymes are also necessary for immunity, ageing, tissue repair, blood fluidity and detoxification.⁴

Pancreatic function relates to nutrient absorption; reduced levels of Pancreatic Elastase 1, a marker for pancreatic function, are seen in nearly one-third of patients with osteoporosis⁵ along with lower levels of vitamin D.⁶

Modern diets high in sugar and refined foods overstress the pancreas and result in metabolic syndrome and an increased risk of Type 2 diabetes, which accounts for 90-95 per cent⁷ of the two million diabetics in the UK.⁸



Sprinkling half a teaspoon of cinnamon on your breakfast should help to increase insulin sensitivity.⁹

Excess weight creates adipocytes around the abdomen, which metabolically dampen the effects of insulin,¹⁰ meaning the pancreas has to work harder to feel the effects.

Zinc is needed for insulin synthesis,¹¹ so eat plenty of pumpkin seeds, chicken, chickpeas and baked beans to encourage pancreatic health.

Chromium¹² and niacin are needed for glucose tolerance factor GTF, which assists glucose uptake in the cells. Eat broccoli, garlic, basil, lean beef, tuna, almonds and mushrooms.

Magnesium intake improves insulin response and aids GTF; vitamin B6 helps its absorption. Eat almonds, sunflower seeds, cashew nuts, spinach, lentils and wholegrains.¹³