Seafish 18 Logie Mill Logie Green Road Edinburgh EH7 4HS

t: +44 (0)131 558 3331 f: +44 (0)131 558 1442

Seafish Origin Way Europarc Grimsby DN37 9TZ

t: +44 (0)1472 252 300 f: +44 (0)1472 268 792

Seafish Fishgate William Wright Dock Hull HU1 2ET

t: +44 (0)1482 486 480 f: +44 (0)1482 486 489

e: seafish@seafish.co.uk w: www.seafish.org SIN: http://sin.seafish.org

Supporting the seafood industry for a sustainable, profitable future





The Price of Fish?



Price of Fish: Foreword

One of the world's most valuable resources

Seafood is one of the world's most valuable natural resources. Today, it has become the most widely traded of all global resources in a world needing more seafood than ever before.

Our ability to feed a hungry world is one of the biggest issues of the new century. The seafood industry recognises the need to deliver a profitable and sustainable future for everyone involved in the seafood chain, from fishermen through to consumers.

The seas have the potential to help feed our fast-growing population, with new developments in aquaculture contributing alongside wild catch.

The UK seafood industry is a world leader in effective fisheries management. We must ensure that the views of every sector of the seafood industry are properly represented in the debate around the Marine Bill, so that the health benefits of seafood and its socio-economic importance are respected alongside a sustainable marine environment.

It is our absolute individual and collective responsibility to provide leadership in the efficient harvesting of those resources on which the seafood industry depends. This responsibility extends to the protection of marine ecosystems and the sustainable use of our marine resources.



JOHN RUTHERFORD CHIEF EXECUTIVE SEAFISH

The true price of fish

The next time you tuck into your fish and chips or pick up a piece of plaice at the supermarket, please spare a thought for the men and women who catch the fish and the families who wait at home for their safe return.

Fishing remains the UK's most dangerous peacetime occupation. In 'Images of Fishermen' author Bui Tyril provides a vivid description of what he calls 'no ordinary job':

"Heaving and rolling at the mercy of the ocean while working under immense pressure, often on wet and slippery decks with gears grinding, winches turning and ropes hauling..."

The threat of death and serious injury is ever present.

At the Royal National Mission to Deep Sea Fishermen (the Fishermen's Mission) we are only too aware of the price men and women pay to put fish on our plates. And since 1881 we have made it our business to provide emergency and welfare support to fishermen and their families.

It is our privilege to work with these unsung heroes to whom we all owe a debt of gratitude. We should never forget the price that our fishermen and their families pay to put fish on our plates.



CAPTAIN DAN CONLEY CHIEF EXECUTIVE FISHERMEN'S MISSION

Contents

Foreword	3	The Price of Fish: pounds and pence
John Rutherford, Chief Executive, Seafish Captain Dan Conley, Chief Executive, National Mission to Deep Sea Fishermen		Austin Mitchell MP, Great Grimsby Stewart Crichton, Orkney Fishermen's Society Ltd
The Price of Fish: risking lives at sea	6	The Price of Fish: seafood and health
Reverend Michael Hills, Chaplain to Hull fishing fleet		Juliette Kellow, nutritionist Matt Dawson, former England rugby player and winner of Celebrity Masterchef 2006
The Price of Fish: fishing and the environment	10	Afterword
Simon Edwards, Marine Stewardship Council		
The Price of Fish: stock levels	14	Barrie Deas, Chief Executive, National Federation of Fishermen's Organisations
David Stevens, skipper of RFS certified vessel Crystal Sea Dr Bill Karp, National Oceanic and Atmospheric Administration		Contact details
The Price of Fish: the future of food	20	
Helga Josupeit, Food and Agriculture Organisation of the United Nations Mitch Tonks, celebrity chef		

24

28

30

31

44 Heaving and rolling at the mercy of the ocean while working under immense pressure, often on wet and slippery decks with gears grinding, winches turning and ropes hauling..."

Bui Tyril, from 'Images of Fishermen'

Risking Lives at Sea

Fishing at sea is probably the most dangerous occupation in the world- an estimated 24,000 deaths occur each year.

The days when fishermen could go to sea in any vessel, fish where and when they wished, and land as much fish as they could catch have gone forever – but the dangers of fishing remain as great they as they have always been.

According to the Marine Accident and Investigation Bureau, the UK fishing industry experienced 180 fatal accidents between 1992 and 2006. These accidents resulted in the death of 256 fishermen, with nearly a third of these fatalities attributed to fishermen going overboard.

The average rate of 126 deaths per 100,000 fishermen each year is many times higher than that for other areas within the UK workforce.

With over 300 accidents involving fishing vessels reported in 2007, safety and training are vital.

What can be done to make fishing safer?

Training

- All fishermen complete basic safety training in sea survival, fire fighting, first aid, health and safety and safety awareness. In addition, skipper, mates and engineers working on larger vessels are required to hold statutory Maritime & Coastguard Agency (MCA) Certificates of Competency
- The MCA works closely with fishing federations to improve fishermen's safety through training

Risk assessment

- Safety awareness training provides fishermen will an understanding of the fundamentals of risk assessment
- Continued improvements in risk assessment contribute to the reduction in the number of accidents that lead to injuries and fatalities
- Vessel surveys and inspections have now become standard for all fishing vessels

Life saving appliances

- Personal Flotation Devices (PFDs) are still one of the most important forms of lifesaving equipment
- Personal Locator Devices are now readily available to provide fishermen with a means of being found.

66 8,000 lives lost in Hull alone

Hull knows the price of fish all too dearly. Our fishing community has paid the price in the harshest possible way with more than 8,000 men lost to the sea. This is a vibrant, hardened community that shares the hardships of its men at sea, understanding the constant anxiety that affects their families – as well as the uncertain wages.

In the dark winter of 1968, having lost three trawlers and crews in as many weeks, women of this community campaigned nationally for greater safety at sea. Despite opposition, they won and we remain in their debt. Do not ask to know the true price of fish. It is paid for in men's lives."

REVEREND MICHAEL HILLS CHAPLAIN TO HULL FISHING FLEET

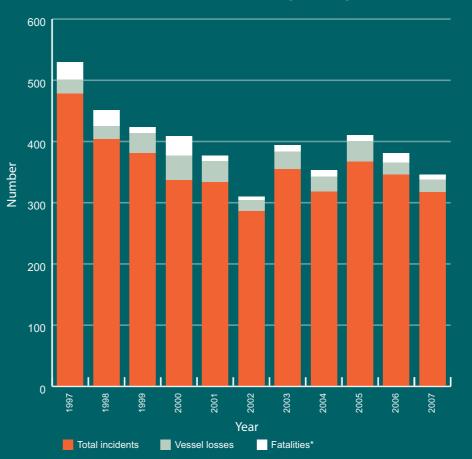




UK fishermen are subject to a fatal accident rate 24 times higher than construction workers.

THE PRICE OF FISH: RISKING LIVES AT SEA

Number of incidents, lost vessels and fatalities involving UK fishing vessels



Sources: Maritime and Coastguard Agency Marine Accident Investigation Branch

* Number of crew deaths on UK registered fishing vessels.



The Environment

European fisheries are a vital source of food for this country and our trading partners. Our seas provide employment, recreation and economic support for rural communities – and fishermen play a key role in the stewardship of the marine environment.

Since the 1960s, successive waves of legislation, controls on fishing effort and voluntary codes of conduct led by fishermen have provided a framework for the responsible management of our ocean resources. The fishing industry welcomes the advent of the Marine Bill for the further clarity it will bring to the management of our marine environment.

Gear Technology

Many fisheries are based on a mixture of species. Much work has gone into creating new fishing gear that will reduce 'discards' (non-target or over-quota species of fish that are thrown back into the sea) and also reduce the impact of fishing gear on the environment. This industry wants the practice of discarding stopped, and has a vested interest in seeing all marine stocks managed sustainably.

New gear technologies that can target certain species and avoid the capture of others are being trialled. Seafish technologists have developed a 'turned' mesh trawl that requires less netting to create a trawl and reduces fuel use by fishing vessels. All of these measures are making fishing greener and less damaging to the environment. **Case Study: The Trevose Box** The Trevose Box was created as a result of dialogue between fishermen and policymakers in the early years of this century. It is now an area of some 3,600 square miles officially closed to fishing. Fishermen from South West England, Ireland, France and Belgium agreed to the closure of this area because they wanted to create a sustainable future for stocks such as cod, haddock, sole and whiting.

Since 2005, the area has been closed every February and March to allow fish to spawn. Fishermen are already reporting increased numbers of cod throughout the year, and scientists from the Centre for Environment, Fisheries and Aquaculture (Cefas) have confirmed that the closures are likely to lead to improved fish stocks in the area.

How Fishing is Helping Measures introduced to reduce fishing

impacts include:

• Minimum mesh sizes and minimum landing sizes.

The smaller the mesh on a net, the more fish are caught. Minimum mesh sizes for whitefish trawls, for instance, have increased from 90mm to 120mm in recent years. Similarly, minimum landing sizes in the UK are stringently enforced to ensure that no juvenile fish reach the food chain in this country "The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of our living aquatic resources."

FAO UN, 1995

- 'No take' zones and managed fishing effort.
 Fishermen have created voluntary 'no take' zones, working with environmentalists around Britain, to help create sustainable fish stocks. Examples include the shellfishery in The Wash and the Trevose Box off Cornwall
- Stock Recovery Plans.
 From 2001, Scottish fishermen have worked under a management regime which includes short and long-term action to see a recovery in North Sea cod stocks. The latest data reported in 2008 has seen a rapid increase in cod numbers in the North Sea – strong evidence that action by fishermen to protect stocks is working
- Illegal, unreported and unregulated fishing IUU, or 'black fish', encompasses unauthorised fishing and all fishing activities that are a serious breach of regional, national or international rules.

Fishing is well controlled in UK waters where there are strict regulations, including the registration of buyers and sellers introduced in 2006. On a global scale, however, IUU fishing is still a major issue in some areas where it can undermine local markets and damage local fisheries.

The seafood industry condemns IUU fishing and fully supports the application of the regulations. Seafish is actively working with government departments to support industry and NGOs on the total eradication of IUU.

II Doing the right thing, with enthusiasm

Most fishermen I have encountered have a deep-seated desire to do the right thing. Voluntary schemes such as the real-time closures in Scottish waters have demonstrated amply the willingness and enthusiasm of the industry to engage in constructive conservation measures. Fleet capacity in the UK is approaching an appropriate level to enable us to rebuild stocks and achieve both profitability and sustainable fishing. This exciting prospect has seen the UK fishing industry whole-heartedly embrace the principals of Marine Stewardship Council accreditation, a milestone of significance unprecedented in the last 30 years."

PROFESSOR MICHEL KAISER, PROFESSOR OF MARINE CONSERVATION ECOLOGY, BANGOR UNIVERSITY

THE PRICE OF FISH: THE ENVIRONMENT

Case Study: The Wash By the middle of the 1990s, shellfish stocks in the Wash were at crisis point. Overfishing and low recruitment rates meant that cockles and mussels were in danger of disappearing for good.

In 1996, Cefas recommended a recovery plan – and fishermen took a very positive move by closing their suction dredge fishery and only working shellfish beds by hand to protect juvenile stock. This was followed by an agreement to reduce discards from the cockle fishery, reduce daily quotas and limit suction dredging to sandy seabeds.

In return, the fishermen found that they had gained a willing partner in Natural England who, in 2006, agreed to support a 1,400 tonnes dredge-based mussel fishery in a previously restricted area of the Wash. This was the first time this area of the seabed had been fished for over a decade.

As a result of these steps taken in partnership, the Wash shellfishery is now ranked as 'recovering' – demonstrating that sustainable fishing and conservation can go hand in hand. The UK has more fisheries certified as sustainable by the MSC, or in the process of certification, than any other nation.

G Leadership in sustainability

PD-97

The Marine Stewardship Council (MSC) is the internationallyrecognised standard for certified sustainable seafood. Set up in 1997 to recognise and reward sustainable fishing, the MSC is an independent, market-based fishery certification and eco-labelling programme based on collaboration, credibility and rigour.

The UK fishing industry is sending out a very positive message to consumers of its support for sustainability. For instance, more than half of Scotland's fisheries (by value) are at some stage in the assessment process with an ever-increasing number achieving certification – and there are more throughout the UK.

These fisheries exemplify the leadership that is transforming the global seafood industry onto a sustainable footing for the future."

SIMON EDWARDS, MARINE STEWARDSHIP COUNCIL



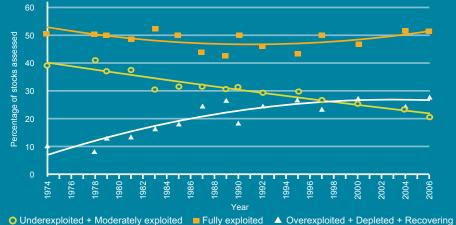
THE PRICE OF FISH: Stock Levels

Fisheries are subject to government controls to conserve stocks and prevent overfishing. Controls on these fisheries are based on regular monitoring and assessment of the status of individual stocks, conducted by independent and government-based scientific organisations. In recent years, some seriously depleted stocks have become the subject of emergency measures and recovery plan proposals.

On the back of scientific advice, stocks are now managed through output measures such as Total Allowable Catches (TAC) and quotas which limit how much fish can be landed, technical measures (mainly mesh sizes and minimum landing sizes) and limits on the number of days boats can spend at sea, in addition to closed areas and closed seasons. The Food and Agriculture Organisation of the United Nations (FAO UN), in its 2008 report, assessed capture fisheries worldwide. The graph shows the change in the proportions of fish stocks that fall into the three FAO UN categories over the last 30 years or so: under or moderately exploited, fully exploited, and overexploited, depleted or recovering.

There's no denying that there are serious problems in some major fisheries around the world but it is important that the broader picture on global fish stocks is viewed correctly. Recent technological developments mean fishermen have become better at catching targeted fish species. Against this background, we should remember that the number of fully exploited fisheries has not increased significantly for ten years.

Global trends in the state of world marine stocks since 1974



• Underexploited + Moderately exploited ■ Fully exploited ▲ Overexploited + Depleted + Recover

Source: FAO UN SOFIA report 2008



"It should be noted that the status of fully exploited is not undesirable provided it is a result of an effective and precautionary management approach." FAO UN, 2008

The number of over exploited fisheries has not increased for the last ten years.

Change doesn't stop there. There are also changes at the retail end. Whilst the UK seafood market is growing and is now worth £5.4 billion, the increasing diversity of consumer taste means that the catching sector can continue to fish sustainably for a wide variety of species.

Consumers in the UK are increasingly switching to less well known types of seafood such as pollack and sea bass, and they are looking for more local and sustainable sources such as pilchards and sprats in South West England, langoustine in Scotland and mussels in Wales.

In short, the combination of further economic benefits and the sustainability of capture fisheries can only be achieved through fisheries management that is able to avoid overexploitation, to maintain (or rebuild) fishery resources, and to improve the commercial viability and generation of wealth from capture fisheries.

The UK seafood industry is changing. Fishermen will be at the centre of any fisheries management schemes and will recognise the responsibilities of this stewardship role.

If We are custodians of the sea

The fishing industry has faced many challenges over the last few years and none greater than balancing fleet size to the total allowable catch for most species.

This process started in the early nineties, when it was clear the fleet was too large for the quota available. When the quotas were fixed and shared equally amongst the fleet, they were not sufficient for individual vessels to fish viably or sustainably. So the industry started the process of fleet reduction. There were also fewer fishermen left to purchase the quotas from those leaving the industry.

This was not an easy time for the industry as the spend on quota reduced the amount we could invest in renewing or modernising vessels. However, we also realised that this was the only course open to us if the industry was to survive.

In recent years, we have been working much more closely with the scientists as we know this will achieve the best results both for stock levels and for the industry. We now regularly take scientists to sea to help with data collation. This ethos of partnership working has spread throughout the industry with many fishermen also now getting involved in the marketing of what we catch to achieve the best price for the fish – both for ourselves and for the customer.

As fishermen, we see ourselves as custodians of the sea. It's part of our job to look after the marine environment by helping the scientists, taking in the rubbish that we catch in our nets and minimising the impact we have on the ocean. We are doing a good job at this, taking part in a number of schemes, such as the Responsible Fishing Scheme and Fishing For Litter, but we feel that more support and recognition from the NGOs would be helpful. We are maybe three to five years behind the public perception.

Importantly though, we have a great pioneering spirit within the industry, which binds us together as fishermen and communities. We will continue to work towards a better future for all of us on this island of ours – and are already a long way towards achieving this. "

DAVID STEVENS, RESPONSIBLE FISHING SCHEME SKIPPER Global production from marine fisheries has remained stable during the last decade.

F Taking stock

Global production from marine fisheries has remained stable during the last decade and the proportion of overexploited and depleted stocks has changed little. UN statistics indicate annual catches fluctuating between 81 and 87 million metric tonnes since before 2000 and projections suggest future catches at similar levels.

In the Northeast Atlantic, recent annual catches have declined slightly but remain close to 10 million metric tons, and UK landings levels are now close to 550,000 metric tons. Catches of many species groups in this region are stable but the condition of some stocks is of concern."

DR BILL KARP, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

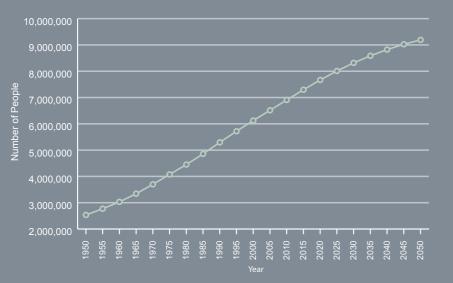
THE PRICE OF FISH: The Future of Food

World stocks of wild seafood species are under increasing pressure. Globally, the total consumption of fish has increased, from 45m tonnes in 1973 to 110m tonnes in 2006. Consumption is expected to increase further but will differ by region according to population dynamics and changes in incomes, affordability of seafood, and changes in diets and tastes.

- Aquaculture and capture fisheries currently supply the world with approximately 110 million tonnes of fish, or 16.7kg per capita per year, for human consumption
- Overall, fish now provides at least 15% of the animal protein intake for approximately 2.9 billion people
- For the first time aquaculture has the capacity to provide half of all fish consumed worldwide.

World population is also expanding and is expected to increase to 7.6 billion by 2020 and 9 billion by 2050. The United Nations forecasts that by 2030, food fish production will edge up to around 130 million tonnes, making it all the more important to ensure that fish stocks are managed to provide for future demand.

World Population from 1950 to 2050 (projected)



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision.

66 8% of the world's population rely on fishing

In 2006, an estimated 43.5 million people were directly engaged, part-time or full-time, in primary production of fish either in capture from the wild or in aquaculture. For each person employed in the primary sector, it is estimated there could be four employed in the secondary sector (including fish processing, marketing and service industries), amounting to 170 million in the whole industry. Taking account of dependants, an estimated 520 million people rely on the sector – nearly 8% of the world population."

FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS 'Food security' is "a condition when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

FAO UN, 1996



Fisheries can create wealth for local economies and contribute to food security whilst demonstrating sustainable production techniques.



THE PRICE OF FISH: THE FUTURE OF FOOD

For consumers, purchasing seafood is a complex decision with price, taste, and familiarity being important. In the current economic climate, consumers need to be reassured that the seafood they are buying is good value in comparison with other proteins.

Many consumers have limited knowledge about the industry issues of catching method, stock status and the complex supply chain. For such consumers, these issues should be dealt with by those from whom they buy the fish namely the foodservice operator or retail outlet. Eco-labels, provenance and product traceability are becoming the industry norms. They are used to distinguish products and reassure buyers that the market value of their fish is not compromised by negative images of overfished stocks and environmental degradation.

Between 1974 and 2006, purchases of fish in UK households increased by 38%, with a report from Defra in 2007 estimating UK seafood consumption at 8.6kg per capita. Salmon, tuna, cod and haddock remain the most popular species with UK consumers.

The seafood industry recognises that it must work with international organisations to establish a workable management system. The future will be challenging, but fisheries can create wealth for local economies and contribute to food security whilst demonstrating sustainable production techniques – as the recent increase in certification schemes demonstrates.

Grilled to perfection

Take a moment to reflect on the modern world and the way we live. We exercise less, we eat more prepared foods and the population is growing in size. What would be one thing we could do to create some balance in all this? Start to eat more fish than you did before. Anyone can cook a great piece of fish in minutes. It is quick, easy and packed with nutrients which benefit our health. I can't think of another food this good - or enjoyable. Why aren't there queues at fish counters and fishmongers across the country? It beats me!

MITCH TONKS, CELEBRITY CHEF

THE PRICE OF FISH: Pounds & Pence

Seafood is a multi-billion pound industry the UK. In this country, four out of five households consume seafood at least once a month.

Recent surveys and reports have revealed that the overall economic importance of the fishing and seafood processing sectors is much greater than the sales values of each sector:

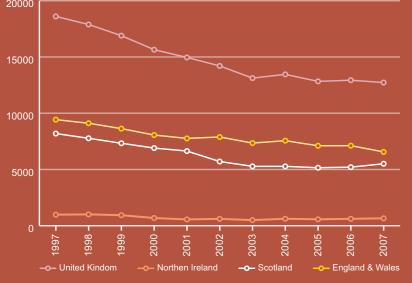
• The UK fishing industry employs around 13,000 fishermen working on 4,500 active vessels

Number of Fishermen from 1997 to 200

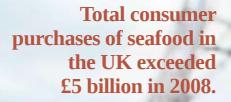
- The 2008 Seafish survey of the processing sector found that the UK fish processing industry provides 14,700 full time jobs in 480 units
- UK vessels landed 610,000 tonnes of sea fish (including shellfish) in 2007, with a value of £645 million

If the UK fish catching sector were to be removed entirely, the impact on the UK economy would be as follows:

- GDP would decrease by around £700 million
- Around 28,000 full time jobs could be lost throughout the wider economy



Source: Marine and Fisheries Agency







THE PRICE OF FISH: POUNDS AND PENCE

The UK processing sector depends, to a large extent, on supplies of imported fish and has a larger overall value than the catching sector. If the fish processing sector were to be removed entirely, the impact on the UK economy would be:

- GDP would decrease by around £4 billion
- Around 120,000 full time jobs would be lost throughout the wider economy

In Scotland, the region in which fishing has the largest presence, the impact of removing all fishing and fish processor sectors would reduce Scottish GDP by around 1%.

Supply: an increasing proportion of raw materials for processing is imported into the UK. This trend has been apparent for a number of years but the rate of increase is slowing. Sales: 2008 Seafish survey of the UK fish processing industry shows an increasing proportion of processed sales being made to multiple retailers.

- The UK imported 782,000 tonnes of seafood at £2.2 billion in 2008
- 415,000 tonnes of seafood were exported from the UK in 2008 with a value of £1.0 billion
- 137,600 tonnes of frozen seafood were sold in the UK retail sector in 2008 for £746 million, a 6% increase in value and a 3% increase in volume compared to 2007

66 Orkney without fishing?

All but two of Orkney's 18 inhabited islands support commercial fishing. The shellfish fleet in particular has a major impact on the local economy. Each year, around 150 vessels land 2,000 tons of brown crab, 1,000 tons of velvet crabs and 100 tons of lobster. This activity employs around 350 fishermen with a further 150 employees on shore-based processing operations – Orkney is widely recognised as one of the premier crab processing areas in Europe. But the wider benefits to the economy are significant, including the employment of those who support the industry and transport. Orkney without fishing is impossible to imagine."

STEWART CRICHTON, ORKNEY FISHERMEN'S SOCIETY



Seafood and Health

Seafood is good for every part of the body – from head to toe. The UK Scientific Advisory Committee on Nutrition has recommended that all adults should eat at least two portions* of seafood every week, at least one of which should be oil-rich. This is endorsed by experts at the Food Standards Agency, the British Heart Foundation and the British Nutrition Foundation.

Seafood is the best natural source of Omega-3 oils, which are particularly beneficial for heart health. They are also necessary for brain development, joint function and healthy skin. New research shows that the range of fish and shellfish containing high concentrations of Omega-3 oils is wider than previously realised. For instance, mussels and crab have emerged as key sources – good news for those who are not keen on stronger tasting fish. Protein-rich seafood also provides a wide range of minerals and vitamins that have important functions in the body. These include:

- Iron deficiency can lead to fatigue
- Zinc bolsters the immune system
- Iodine good for growth
- Selenium supports the immune system and is believed to have anticancer properties
- B vitamins responsible for converting food to energy in cells
- Vitamin A essential for healthy eyes, skin and hair
- Vitamin D promotes healthy bones and teeth

The latest research on the benefits of seafood strongly suggests that seafood can improve mental health, reduce the risk of diabetes and dramatically cut the risk of repeat events in heart attack and stroke victims.¹

*1 portion = 140g

Seafood – and eat it

It's not often that health experts encourage us to eat more of something that tastes great. That's why seafood is such a wonderful exception. Seafood is the ultimate fast food – most dishes are quick to prepare – and it's amazingly versatile. So why not head for the fish counter more often? Nutritionists recommend we eat two portions of fish a week, one of which should be oil-rich. Whitefish and shellfish contain a wide range of vitamins, proteins and minerals too. Seafood tastes delicious and is so good for you. Put a fish on your dish today!"

JULIETTE KELLOW, INDEPENDENT NUTRITIONIST





Of course, the vitamin and mineral content differs depending on the fish or shellfish - so it's good to vary what you eat, but with around 100 species available to us in the UK, that shouldn't be a problem.

66 Why do sports stars eat fish?

We're always wondering how to reduce our weight without the drag of a diet. Plus we still want flavour, texture and the feeling of being topped up with energy. There is a solution: seafood.

The range of seafood available in the UK is phenomenal and our coastline is the envy of many countries.

Also, you'll never meet a professional sports person who does not use fish as an integral part of their nutritional intake. With so much goodness, it's a simple recipe for healthy living.

Sports stars eat fish because it tastes great and is good for you – more people should catch on to this."

MATT DAWSON, FORMER ENGLAND RUGBY INTERNATIONAL & WINNER OF CELEBRITY MASTERCHEF 2006



A time for change

The 2002 CFP reforms, and in particular the establishment of the Regional Advisory Councils (RACs), began to provide the means for fishermen's voices to be heard and be taken fully into account. This was an important step forward in participative decision making but we should not delude ourselves that we have arrived at the final destination. RACs may provide stakeholders with a much stronger voice than previously but that voice is still heard within the context of a system prone to prescriptive, one-size-fits-all, micro-management.

The next reform of the CFP is scheduled for 2012. Already it is possible to see the emergence of two separate and in many ways contradictory themes. On the one hand, the strengthening of the prescriptive, micro-management approach, now underpinned by modern technologies such as electronic logbooks and VMS; on the other, an entirely new approach, in which a framework of broad principles and standards for fishing sustainably are laid down, and the fishing industry is given responsibility to determine how those criteria are to be met.

It is this latter approach that offers a path away from the spiral of policies that repeatedly fail to deliver their promise and towards a framework that allows grass-roots initiatives to thrive within a system of self-regulation. Of course, much remains to be done before the new approach can be implemented. Once the broad principles and standards are laid down (after full consultation with the RACs) the key will be management plans, prepared by industry groupings in conjunction with fisheries scientists. These plans will detail how each group of vessels will operate in conformity with the broad sustainability standards for the next five years or so. The grouping will produce the documentation that will allow the plans to be externally audited.

It is within this framework that the kind of initiatives that have emerged in the UK in recent years could find full fruition. Much, of course, remains to be done. First, the European Commission, the Council of Ministers and possibly the European Parliament, will have to be persuaded to abandon the command and control approach in favour of a framework within which self-regulation can thrive. Ways of co-ordinating micro to macro will have to be developed.

I believe the time has come for this approach.

Bank

BARRIE DEAS CHIEF EXECUTIVE NATIONAL FEDERATION OF FISHERMEN'S ORGANISATIONS

Contacts

Centre for Environment, Fisheries and Aquaculture Science (Cefas) www.cefas.co.uk

Depart for Environment, Food and Rural Affairs (Defra) www.defra.gov.uk/marine

Fisheries Research Services, Aberdeen www.marlab.ac.uk

Food and Agriculture Organisation of the United Nations www.fao.org/fishery/en

Marine Accident Investigation Branch (MAIB) www.maib.gov.uk/home/index.cfm

Maritime and Coastguard Agency (MCA) www.mcga.gov.uk/c4mca/mcga07-home

Marine Conservation Society (MCS) www.mcsuk.org

Marine Stewardship Council (MSC) www.msc.org

National Federation of Fishermen's Organisations (NFFO) www.nffo.org.uk

National Oceanic and Atmospheric Administration (NOAA) www.noaa.gov Orkney Fishermen's Society www.ofsorkney.co.uk

Responsible Fishing Scheme (RFS) http://rfs.seafish.org

Royal National Mission to Deep Sea Fishermen www.fishermensmission.org.uk

Scottish Fishermen's Federation (SFF) www.sff.co.uk

The Scottish Government Marine Directorate www.scotland.gov.uk/Topics/Environment/ Water/16440

Seahorse Restaurant www.seahorserestaurant.co.uk

Seafish www.seafish.org

Seafood Information Network (SIN) http://sin.seafish.org

Shellfish Association of Great Britain (SAGB) www.shellfish.org.uk

