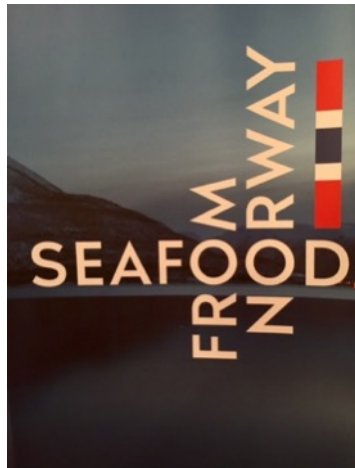




Imperial College
London



Fish & Chips: A Classic 21st Century British “Good Time” Meal!

Dr. David Hughes

Emeritus Professor of Food Marketing

“Frozen on Board” Cod & Haddock Conference

Ålesund, Norway

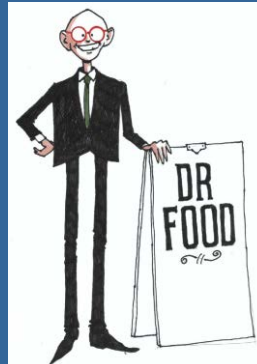
Wednesday, January 10th, 2018



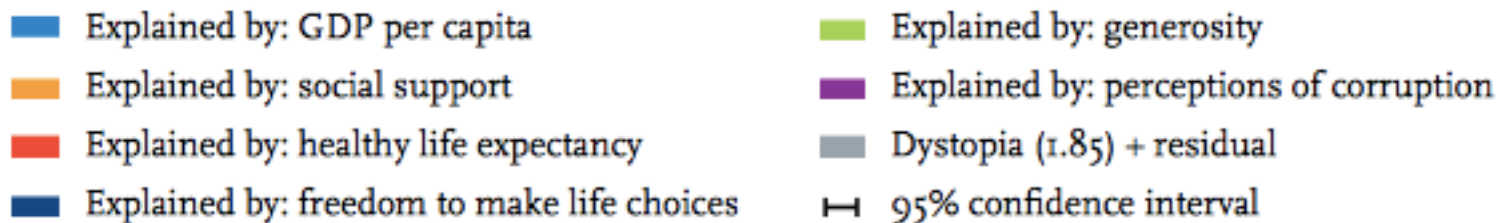
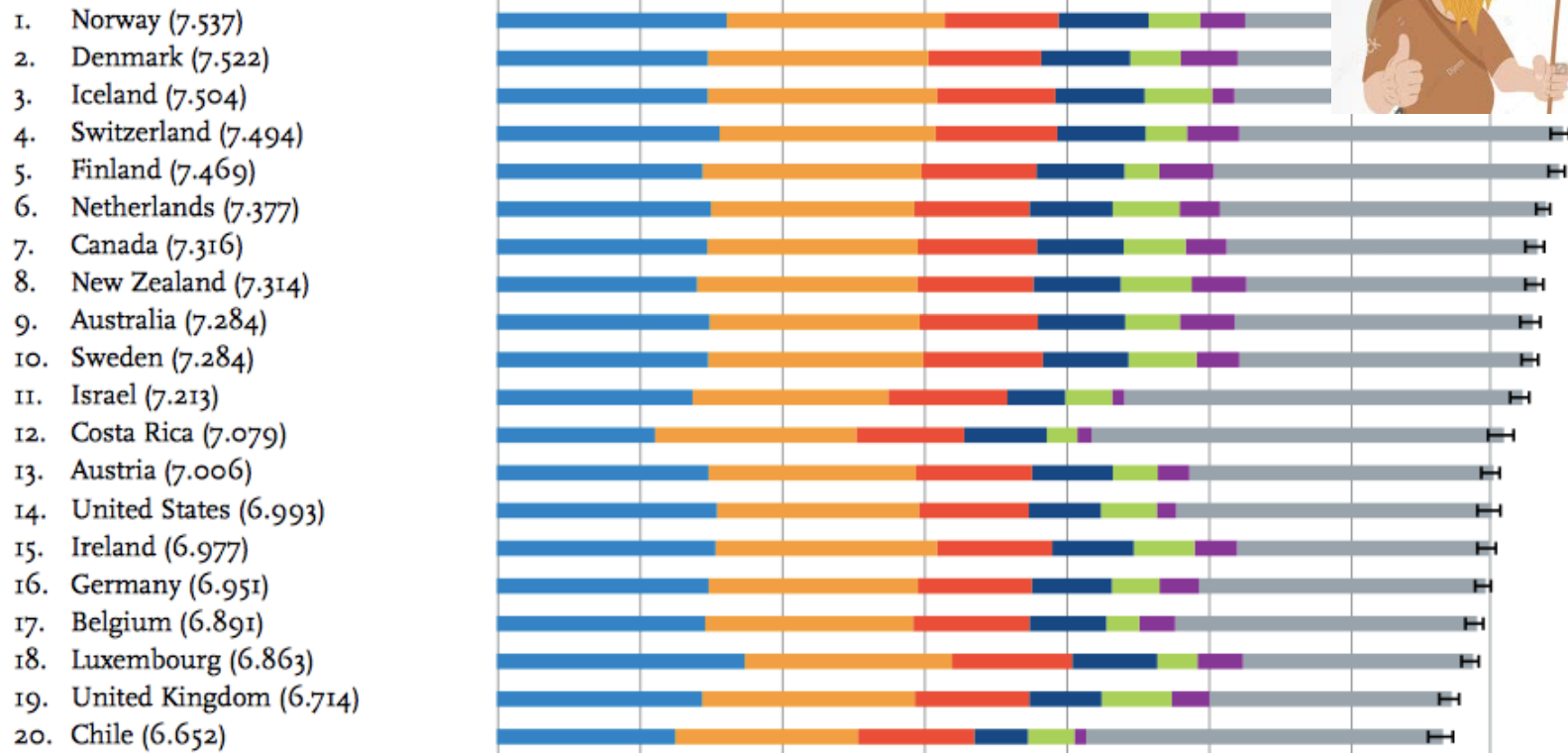
@profdavidhughes

www.supermarketsinyourpocket.com

www.drfood.ca



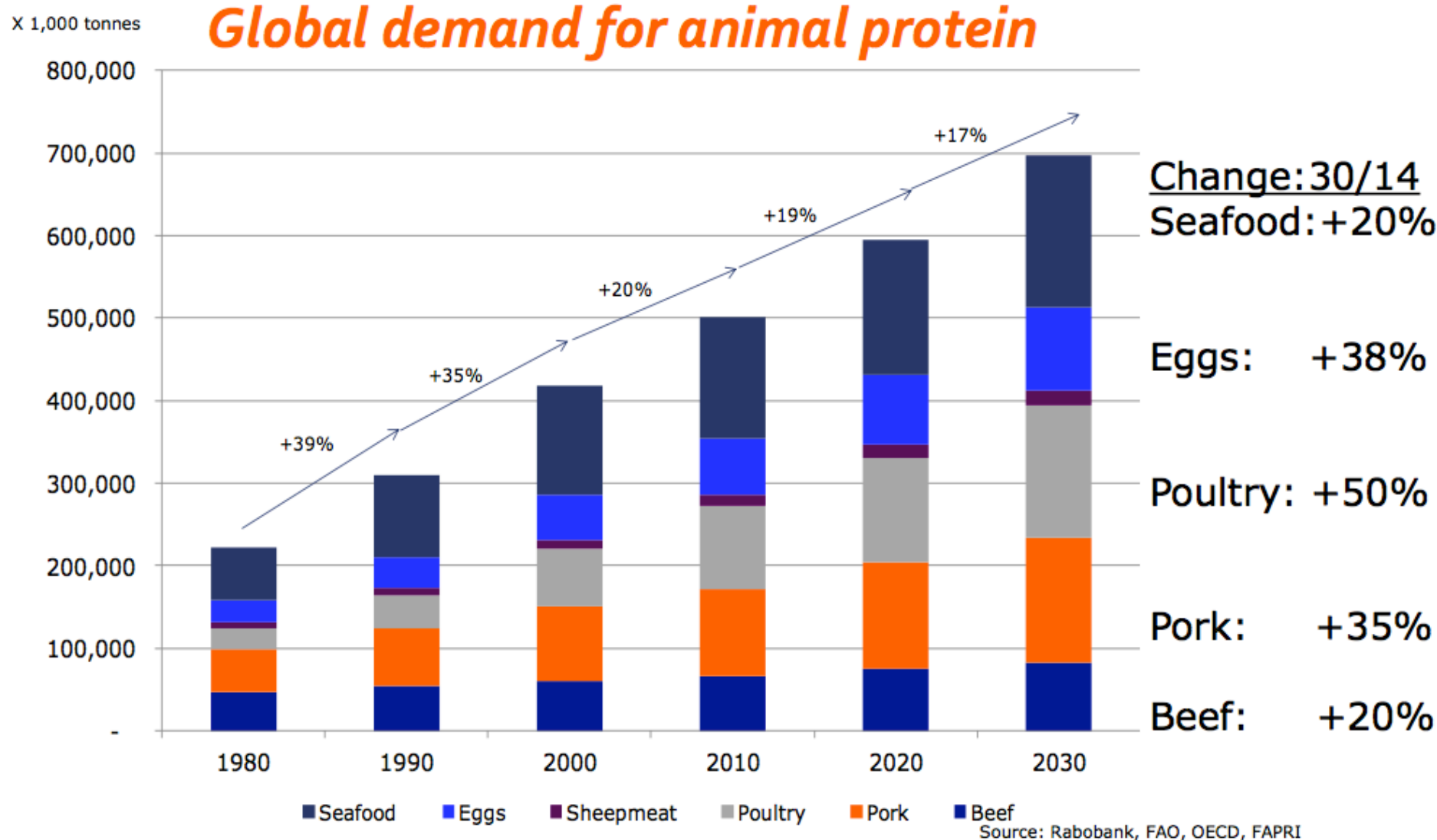
Global Happiness League Table



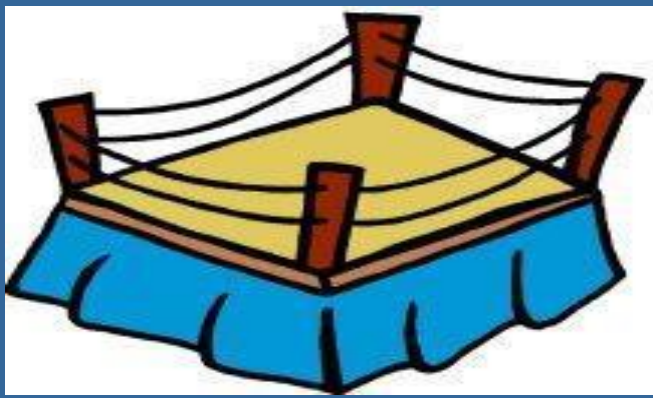
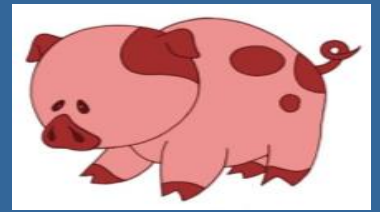


Rabobank

Strong Growth in Global Meat Demand, 2015 to 2030



Source: Nan-Dirk Mulder, Rabobank, 2015





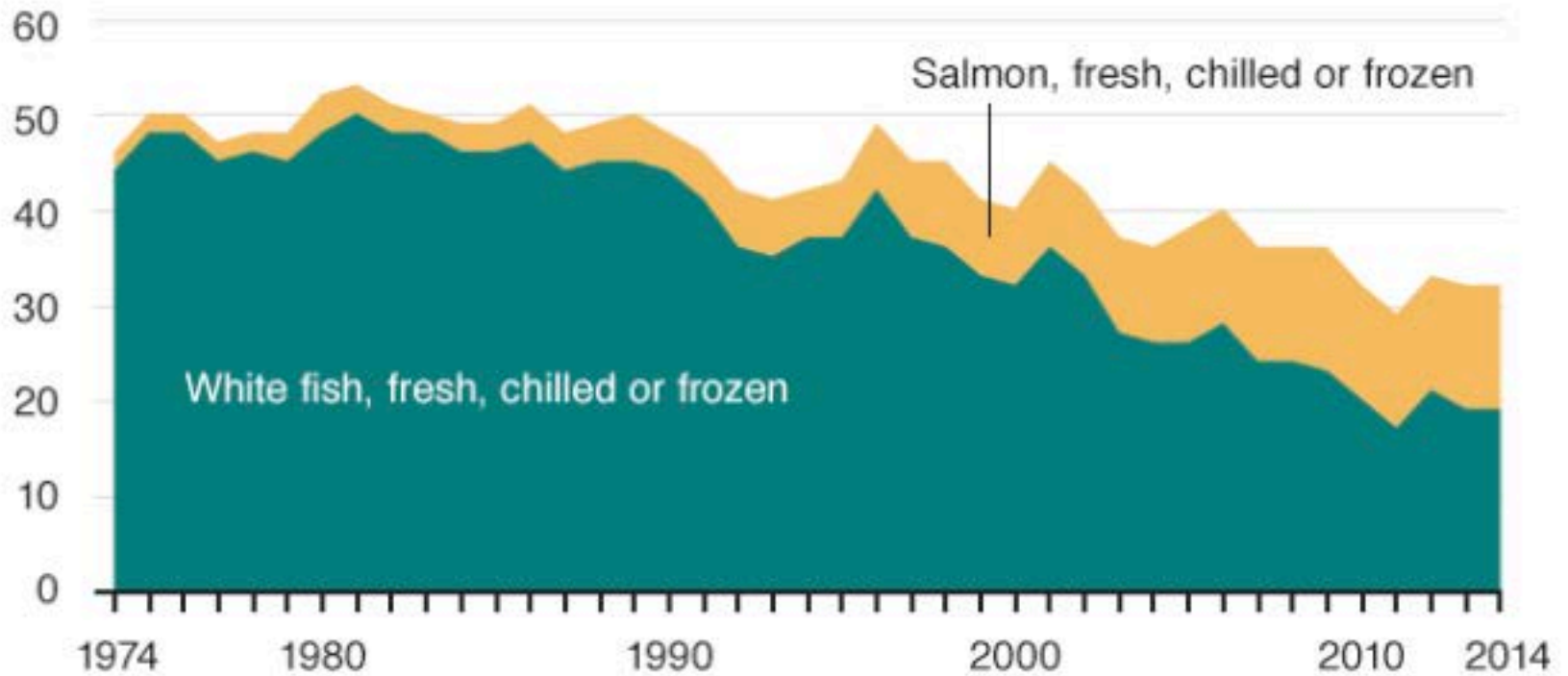
White Fish Fillet & Chicken Breast
Head-to-Head
Competitors
Worldwide



Both
Approx.
US\$3/kg.
NOK24/kg.

Has white fish had its chips?

Grams per household per week



Source: Defra / ONS



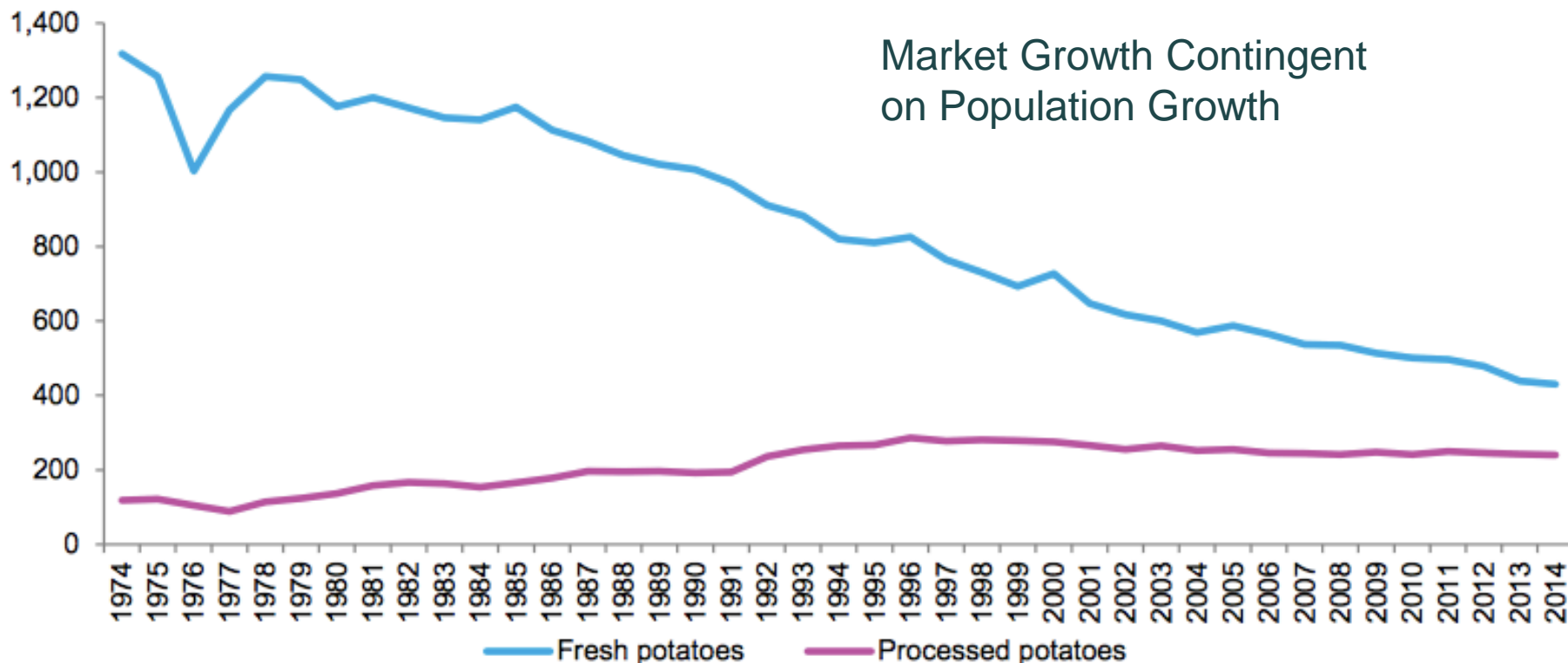
UK Household Purchases of Potatoes, 1974 to 2014: Downward Drift for Fresh and Processed Static at Best.

Figure 19: UK household purchases of potatoes


Source: Defra Family Food Survey



Volume (grams/person/week)



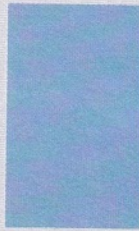
Reality Check on Fish Consumption in the UK

- most consumers understand that fish is healthy and they should eat more. Fish has a brilliant health halo 
- but fish is seen as being expensive & this limits its purchase
- British children prefer fish as fingers and not as fillets!
- salmon, cod, tuna, prawns, haddock are UK's Top Five seafood but per capita consumption is only 8.5 kg. It's 22 kg. in Norway!
- of those eating fish, 47% eat cod at least once/month and haddock 26% once/month – they're popular fish
- however, in UK overall cod and haddock are in long-term volume decline (whereas salmon is in growth)
- in 2017, at retail, chilled and frozen fish were in value and volume growth
- but worrisome demographic profile of in-home fish consumers
- Eat Out/Take Out Fish shows +ve trends for cod/haddock

Top five fresh fish

£667.0m

Total: £1.9bn (+6.5%)



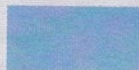
Salmon
(+7.1%)

£263.6m



Prawns
(+11.2%)

£197.0m



Cod
(+8.1%)

£178.1m



Haddock
(+5.1%)

£66.6m



Mackerel
(+6.2%)



UK Supermarket Fish Sales

In 2017 (to September) versus 2016, in an extraordinarily tough market, “fresh” (chilled) and frozen cod and haddock did very well.

Top five frozen fish

£238.7m

Total: £918.2m (+2.7%)



Cod
(+5.5%)

£138.1m



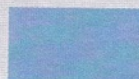
Prawns
(+7.1%)

£114.5m



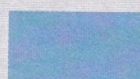
Pollock
(-8.0%)

£73.9m



Haddock
(+18.6%)

£72.7m



Salmon
(-8.2%)

Top five ambient fish

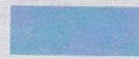
£277.1m

Total: £498.7m (+3.4%)



Tuna
(+5.6%)

£55.2m



Red salmon
(+0.2%)

£41.8m



Mackerel
(+4.0%)

£31.4m



Sardines
(+2.8%)

£28.7m



Pink salmon
(+4.6%)

In 2017, Frozen Fish at Retail Had Slight Volume & Better Value Growth Led by Branded Products from Birds Eye, Young's and Arctic Royal



UK Frozen Fish Category Grew by 4.4% by Value and 0.8% by Volume

Eatwell Guide



Check the label on packaged foods

Each serving (150g) contains

Energy 1048kJ 250kcal	Fat 3.0g LOW	Saturated fat 1.3g LOW	Sugars 34g HIGH	Salt 0.9g MED
13%	4%	7%	38%	15%

of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal

Choose foods lower in fat, salt and sugars

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.



Water, lower fat milk, sugar-free drinks including tea and coffee all count.

Limit fruit juice and/or smoothies to a total of 150ml a day.



Eat less often and in small amounts

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINKS



Belgium



Belgium's new food pyramid puts processed meat in the same section as candy, fries and pizza. Flemish Institute of Healthy Living

Be 100% Sure,
Health Authorities
are Determined to
Reduce Meat Consumption
in Many Countries
(particularly high income
mature economies) BUT
Encourage Fish in Meals.

Norwegians Fail to Meet Your Government's Fish Dietary Recommendations

Dietary guidelines by the Norwegian Directorate of Health

- Enjoy a varied diet with lots of vegetables, fruit and berries, whole-grain foods and fish, and limited amounts of processed meat, red meat, salt and sugar.

Even in Fish-Loving Norway, You “Under-Consume” Fish in Your Diet!

Fish

39 % of men and 31 % of women eat the recommended amount of fish.

24 % of men and 21 % of women eat the recommended amount of fatty fish.



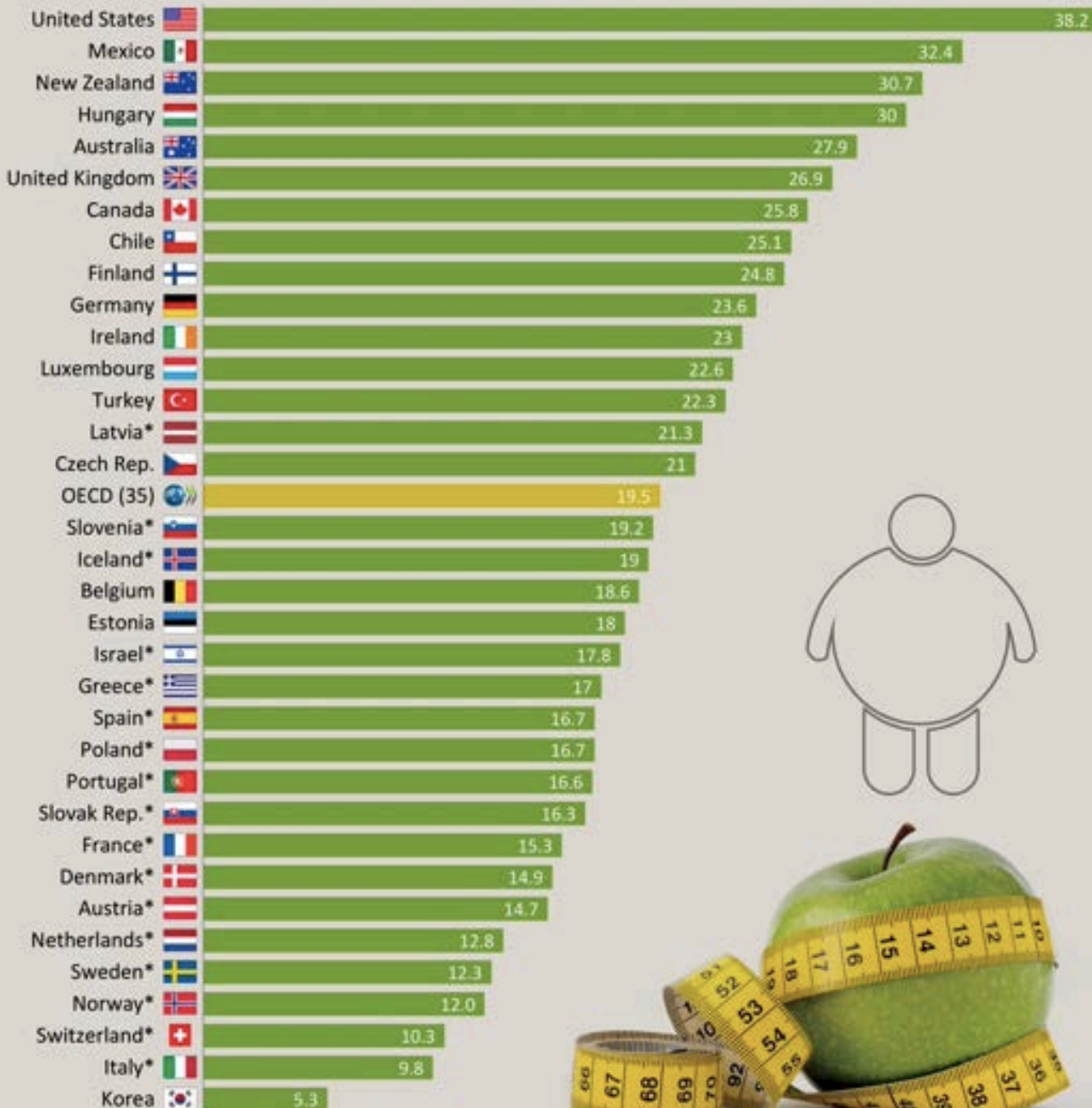


OECD Obesity League 2016

This is an Issue
for Fish & Chips
in the UK. Only the
Hungarians are Fatter
in Europe!



The Health Halo of Fish
Reduces the Guilt of
Eating Fish & Chips!



Combining Good Time and Wellness!



Alcoholic Juice Bars

This Juice and Smoothie Bar Switches to Serving Healthy Cocktails at Night



Healthy Celery Cocktails

This Celery Gimlet Offers a Healthier Alternative to Sugary Drinks



Superfood Cocktail Menus

Exile Bistro's Drink Menu Features Algae and Chaga Mushroom Cocktails

Mini Sizes with “Healthy” Ingredients Legitimizes Indulgent Treat Purchases



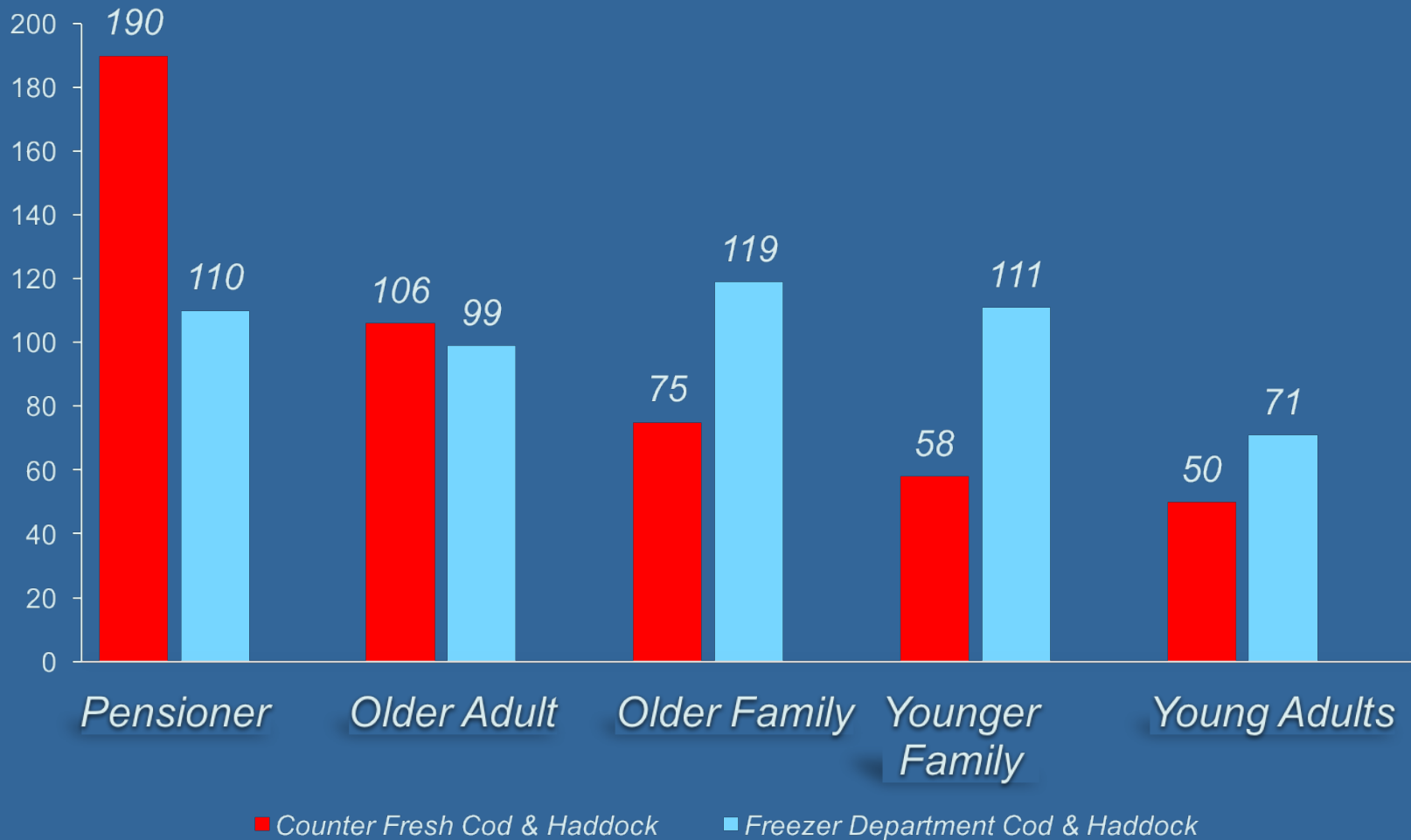
Consumers seeking more routine relief from stress will change the definition of “permissible indulgence” from the rare feast to habitual better-for-you treats.



The Great Tradition of British Fish & Chips!

- cod accounts for one-third of out-of-home fish servings and is most frequently served fried
- both cod & haddock increasing OOH* share whereas salmon decreasing (become routine home meal)
- 10,500 F&C** outlets but numbers declining
- 22% of consumers say they have F&C once per week and 80% consume at least once/year
- 56% of consumers buy F&C to eat back home
- mushy peas, curry sauce, salt & vinegar most frequent accompaniments
- a working class British food tradition enjoyed by all – not least, by “boys” after a night of beer drinking!

Who's Shopping for **Chilled and Frozen** Cod & Haddock in Tesco UK?



Cod & Haddock Consumers on Holiday at Seaside



Special Vehicle for Chilled Cod and Haddock Consumers Going On Their Last, Very Long Holiday



Increased focus on health & product origin



Fresher food through local sourcing & vertical integration



SEAFOOD FROM NORWAY

The Number 1 Global Mega Consumer Trend is the Increasing Concern About The Health of the Family and The Health of the Planet. When Food Shopping, Drives Shoppers Towards “Mindful Choices”*



And a Widespread View that Big Food, Big Business, Big Government are Part of the Problem NOT Part of the Solution

Natural and ethical claims on global new food and drink product launches are on the rise



Source: Mintel Global New Products Database (GNPD)

Consumers today idealize food that is close to its “natural” form

Consumers across the board express the belief that food closer to its natural state is superior to food *changed* by scientific or industrial processes (particularly when that change is seen to be motivated by profit). At its most basic level, this means foods that are:

Grown naturally



Grown without unnecessary chemicals
– respecting rhythms and
interdependencies present in nature

Made simply



Simple ingredients – no unnecessary
ingredients – no unnecessary stages of
preserving or processing

Fish & Chips Can Tick the Natural and Simple Boxes!

ON FOOD, CONSUMERS NEED TRANSPARENCY & COMMITMENTS



63%

care about the origin
of the products they purchase

67%

want fewer
preservatives and coloring agents

60%

want local
brands & fresh products

86%

think that
transparency in companies
is important



Ocean “Consciousness” and Concerns About Sea Life Sustainability on the Rise



David Attenborough: we must act now to protect our oceans from the deadly threat of plastic

The
Economist

December, 2017

Advertisement in the front pages
of *The Economist* magazine
from a Merchant Bank advising
Prospective Customers of Ocean
Environmental Issues



By washing synthetic clothing,
tiny threads called microfibres
are released, polluting both
our oceans and the food chain.
Can investment into sustainable
solutions reduce further harm
to marine life and human health?

For a fresh perspective,
visit LombardOdier.com

rethink everything.



LOMBARD ODIER
LOMBARD ODIER DARIER HENTSCH

PRIVATE CLIENTS
ASSET MANAGEMENT
TECHNOLOGY

Imperial College
London



PRODUCT CATEGORIES > SEAFOOD

Town & Country debuts humanely harvested cod

Fish are stunned immediately, which reduces damage to meat from stress hormones



October 24th, 2017

GREENPEACE

**THIS FAR,
NO FURTHER**

**Protect the Arctic
from destructive
trawling**

Relentless
Special Interest
Groups Adept at
Using Social Media
To Connect with
Millennials

Imperial College
London

**There's Something Fishy in
the Faux Meat Aisle**

Forget the bloody burgers. Try some crabless cakes.

**We disrupt seafood,
not oceans.**



NEW WAVE FOODS

• Sustainable Seafood •

In 2015, we began developing and perfecting the world's only algae- and plant-based shrimp. Using natural ingredients and cutting-edge science, we bring you a shrimp that is uncompromising in taste. A shrimp without slavery, bycatch, shellfish allergens, antibiotics, and ecosystem devastation. **A shrimp that everybody can love.**

AWARD WINNING VEGAN FISH ALTERNATIVE ARRIVES ON MARKET NEXT YEAR 2018



WE'RE CULINARY REBELS WITH A CAUSE. SEAFOOD WITHOUT SACRIFICE.
[NOTHING FISHY ABOUT IT]



GOURMET PLANT-BASED SEAFOOD™

100% plant based ingredients.

100% taste innovation.



Quorn to spend GBP150m to increase production at UK plant



Quorn is a \$1 bn. Global Brand in the Making



Quorn has also announced its UK sales grew by 15% in the first half of the year.

Global growth rose 19% over the period, while European sales also grew by 29%. Business in the US was also up 40%, while in Asia and Australia sales climbed 35%.



Bill Gates and Richard Branson Back Startup That Grows 'Clean Meat'



MEMPHIS
M E A T S

Memphis Meats: Richard Branson predicts the world will no longer need to kill animals in 30 years

Protein innovation: Cargill invests in cultured meats



Powerful Global Consumer Trends

Customers looking for convenience across channels



Time Starvation

More people are working, and working for longer hours, contributing to a sense of being time starved—especially among busy families and single-parent households.



In **60%** of U.S. households, both adults work (up from 46% in 1979).

50% of parents say it is very/somewhat difficult to manage work and family.



YOUNGER GENERATIONS WILL RESHAPE MARKETS & WORKPLACES WITH DIFFERENT ATTITUDES AND BEHAVIOURS

Centennials

Millennials

BORN | AGES
1997-Present | 0-19
IN 2016

GLOBAL POPULATION IN 2025
2.4 BILLION

BORN | AGES
1979-1996 | 20-37
IN 2016

GLOBAL POPULATION IN 2025
2.03 BILLION

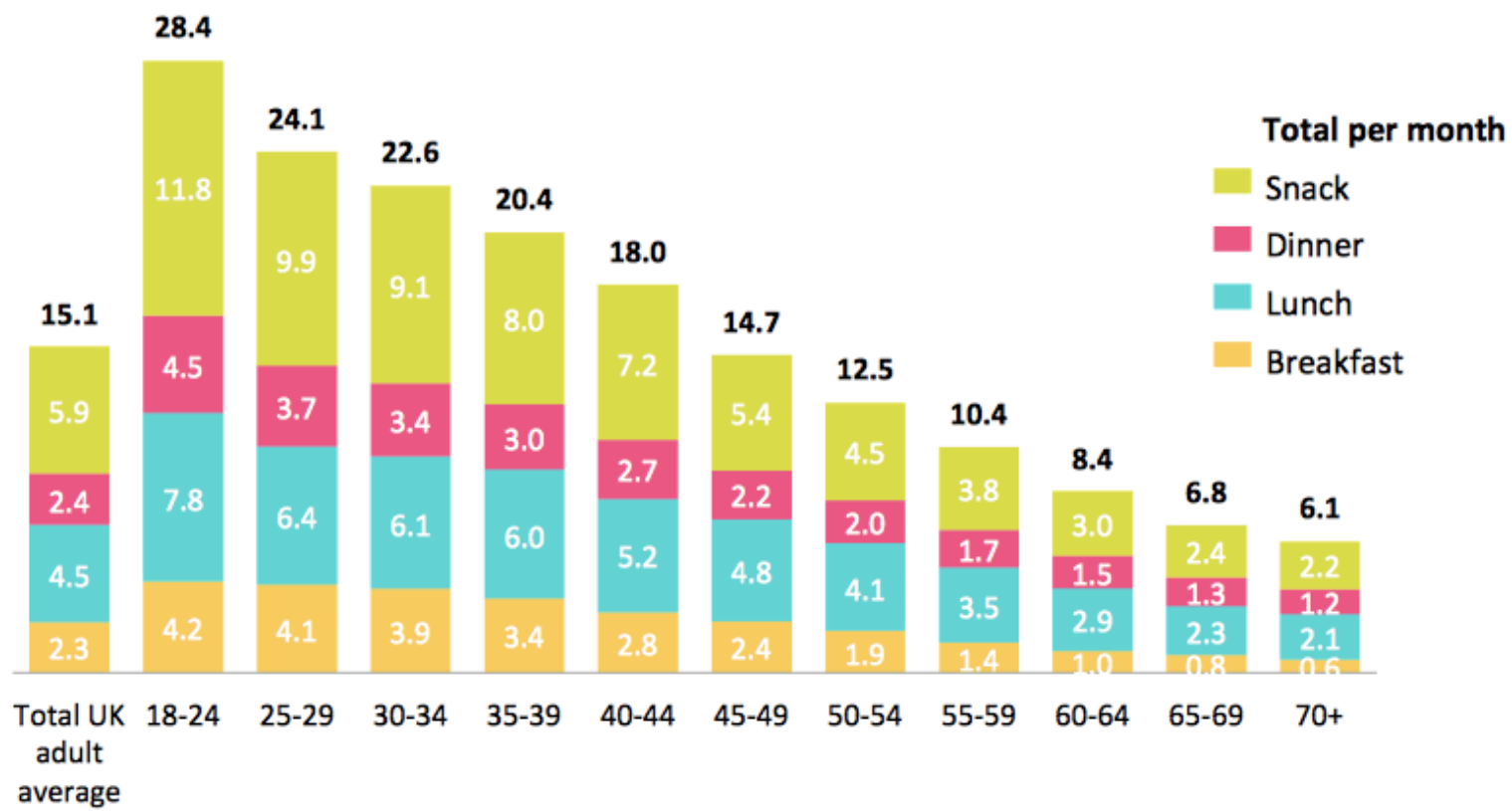
- Many now teens in school and college
- **Few financial commitments**
- First **mobile-native** generation
- **Resourceful** as have grown up in slow growth world

- Many at life stage where **start spending more**
- **Settling down** and starting families
- By 2020, will form **50% of global workforce**
- **Idealist**, prioritise meaning over materialism

Younger Consumers Eat Out Most Frequently in the UK



The Ageing Demographic - Eating out frequencies



MCA. 2016 © | Oxford Farming Conference, the UK Foodservice Market, Jan 2017

Millennial & Centennial Trend Hit List

- cashless society – can't tap it won't buy it!
- eat out/on-the-run VERY frequently
- no main food shop, top up all week, convenience shop
- threat for Big Box – need shop & leisure destination
- entertaining at home but need help
- break down of 3-meal-day – snacking & mini meals
- “Because You're Worth It” – I deserve a treat!
- I am what I eat or what I tweet/Instagram/WhatsApp
- eating healthily but help me!
- I want it NOW, not soon I said NOW!

Food-to-Go Accelerates the Convergence of Food Retail & Food Service





They Sell Plenty of Seafood
But NO Cod and Haddock!



itsu 70 stores and wasabi 40 stores

Much-Loved Part of the UK Food Scene BUT Facing Considerable Challenges!



45 Harry Ramsden's in UK & Eire

Fish and chips fall out of favour with millennials

July, 2017

Sales in fish and chip shops have slumped by more than 4 per cent since 2009



Back in 2009, fish and chip shops represented 6.4 per cent of the whole QSR market, but this figure has since dropped to 5.6 per cent *Getty Images*

“Fish and Chip Shops are Missing Out on Britain’s Growing Food Service Market by Failing to Adapt to the Habits of Millennial Consumers”

Since 2009, F&C Shop Sales -4% but Other QSR +9.2%

* Percent Meals Eaten By

Single diners	42
2 diners	36
3 diners	11
4 or more diners	11



* Preparation Meal Time

2015	30 mins
1990	45 mins
1980	60 mins
1950	90 mins

* Willingness to Pay More for Food

5% more

For healthy

22% more

For better taste

Considerably more

For ready made meal solution!



Snackified Eating

Traditional eating patterns built around three “square,” structured meals a day has given way to modern eating styles. 50% of all eating occasions are now snacks.

A hand with red nail polish is dipping a golden-brown fried snack into a bowl of red sauce. The snack is being held between the thumb and index finger. In the background, another similar snack sits on a plate with green herbs. The background is a dark, textured surface.

91%

of consumers snack multiple times throughout the day

8%

of these consumers forego meals altogether in favor of all-day snacking

33%

of morning snacks are consumed away from home

26%

of afternoon snacks are consumed away from home

TRY OUR NEW LEGGERA RANGE LIGHTER* EATING PIZZAS FOR ONE

Introducing 3 new lighter* eating and tasty recipes topped on our multigrain base. Our Leggera pizzas are perfectly portioned for one. **Available in store now.**



*44% less saturated fat than other pizzas available. Selected stores only.

*44% less saturated fat than other pizzas available. Selected stores only.



Ticking the Trend Boxes

- healthy
- calorie-controlled
- snack/mini-meal
- 5-a-Day claim
- simple ingredients
- convenient
- portable
- no refrigeration
- “fish-friendly”
- recyclable
- brand reassurance
- YES – it’s tasty
- and affordable!

Salmon Serious Competitor for PREMIUM MEATS in Global Mini-Meal & Snack Markets



M&S
EST. 1884
SUSHI SNACK

with soy sauce



NO RAW FISH

per pack without soy sauce
449kJ/106kcal

Energy 5% of your RI

per 100g 623kJ/147kcal

106
CALORIES
PER PACK



10:43
16

M&S
EST. 1884
SUSHI SNACK



M&S

per shortbread

Sushi Mini-Meals/Snacks: Favour Seafood Over Red & White Meat But, Where's the Cod and Haddock Snacks and Mini-Meals?





Oslo International Airport

So, Where's:

THE COD & HADDOCK HOUSE!

UK jerky specialist Meatsnacks to serve up salmon

August 25th, 2017



Salmon Jerky

williwaw | FOOD
FROM PATAGONIA

williwaw | FOOD
FROM PATAGONIA





We've just taken on a factory in the Scottish Highlands to launch our new Wild West Deli Salmon Jerky.



Ålesund Spar



Good for Norway
(and for many other countries)
But Dried and Salted Fish
Difficult to Sell as Snacks
in the UK Market!

Ceviche and Poke (Pokay) with Chilled Cod and Haddock



Cod/Haddock Finger Snacks



Cod/Haddock Sandwich/Wrap

We Need White Fish Snacks NOW!



White Fish Fillet & Chicken Breast
Head-to-Head
Competitors
Worldwide



Both
Approx.
US\$3/kg.
NOK24/kg.

Premium is about upgraded experiences

Cod and Haddock are Premium Items. The Industry Must Provide More Reasons Why They Deserve a Premium Price



Premium is *not*...

Price alone

Reserved for the “elite” or sophisticated

Only for special occasions

About “low fat,” “low sodium,” or “low calorie”

Communicated via words alone

Premium *is*...

People, places, and traditions

Real distinctions in quality

Expressed through values and experiences

About intentionally making things better

Transparency and trust

Pleasure and discovery

MEET THE PRODUCERS

Experts from around Britain who help us bring 100s of fresh ideas to your table



ENGLAND



STRAWBERRIES | MARION REGAN

Awarded an MBE for her services to the fruit industry

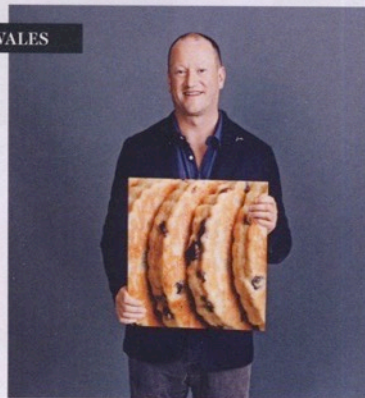
SCOTLAND



ORKNEY CRAB | RONNIE NORQUOY

Fishing for 40 years and helping us source sustainable crab from the wild Atlantic seas

WALES



WELSH CAKES | ROBIN JONES

All our Welsh cakes are hand-turned in the bakery

IRELAND



POTATOES | MICHAEL MCKILLOP

Plants new varieties every season in nutrient-rich soil for delicious potatoes full of goodness

How'd You Like Your Premium Fish? *Med Adjektivers!*:

- wild-caught
- freshly-caught
- locally-caught
- Norwegian
- Barents Sea
- Alex Skjong-caught
- Scottish
- Skrei cod
- traditionally-smoked
- organic
- sustainably-sourced/MSC ...
- environmentally-friendly ...
- free from (antibiotics, etc.) ...

HØG- FJELLSLAM

frå Nord-Gudbrandsdal

Gilde

Fra den
norske
bonden

Områda i Nord-Gudbrandsdalen er kjend for nasjonalparkane Rondane, Reinheimen, Jotunheimen, Snøhetta og Breheimen. Det er her Høgfjellslamma har beita sine heile sumaren igjennom. Lam som beitar i høgfjellet over 800 moh et beiteplanter som vier, urter, gras og lyngplanter Gilde høgfjellslam er nøye utvald etter vekt, klasse og feittgruppe. Norsk natur og dyktige bønder gjer lam frå Gilde til eit kvalitetsprodukt, med ei god smaksoppleving.

Fårikålkjøtt
Ein smak frå høgfjellet



Ingredienser: Lam frampart. **Næringsinnhald pr 100g :** Energi 954 kJ/230 kcal, feitt 17,7 g av dette: metta feittsyrer 7,6 g, einumetta feittsyrer 0,6 g, fleirumetta feittsyrer 6,1 g, karbohydrat 0 g av dette: sukkerart 0 g, protein 17,6 g, salt 0,2 g. Kjølevare 0-4°C. Pakka i beskytta atmosfære.

Vekt : 2,107 Kg Best før : 27.10.2016

Produkt av
Nortura for:

KIWI mini
pris

Nortura SA, Postboks 360 Økern, 0513 Oslo
FORBRUKARKONTAKT: www.gilde.no

NORGE
103
EFTA

L6405



2 301087 321070

554221 SKA-1

“I’ m Willing to Pay a Premium for Your Cod and Haddock in My Fish & Chips Because

- Yummy and really healthy
- A British classic that’s fun and everyone likes
- An affordable treat
- Natural, free from, simple, traceable, sustainable
- Easy to buy/prepare/eat/dispose (e.g. if snacking)
- Great stories about the fish/the meal – wild-caught, heritage, life cycle, provenance, “breed” (e.g. Skrei)
- Consonant with my values on “green”/social issues – environment, fisherman/fish welfare, local economy

CONTACT POINTS:

e-mail

profdavidhughes@aol.com

www.prof davidhughes.com

Telephone contact:

mobile +44(0)7798 558276



@ProfDavidHughes

Retail Blog: www.supermarketsinyourpocket.com



Who's Shopping for Frozen Battered/Breaded Cod & Haddock in Tesco UK?



Source: Tesco shopping data from the dunnhumby data base, 2016/17