



## Connecting with the final consumer is essential for sustainability

Professor Patrick Wall
UCD Institute of Food and Health



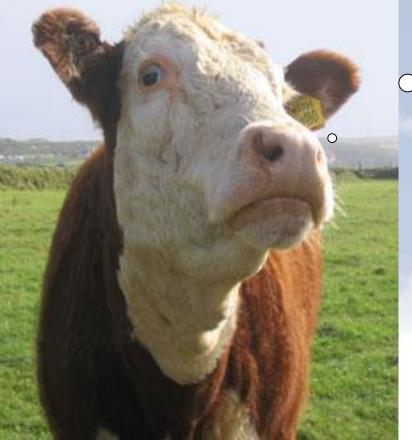
#### The Agri-food business is great one to be in!





#### The Future is looking Good

Provided we can avoid adverse publicity



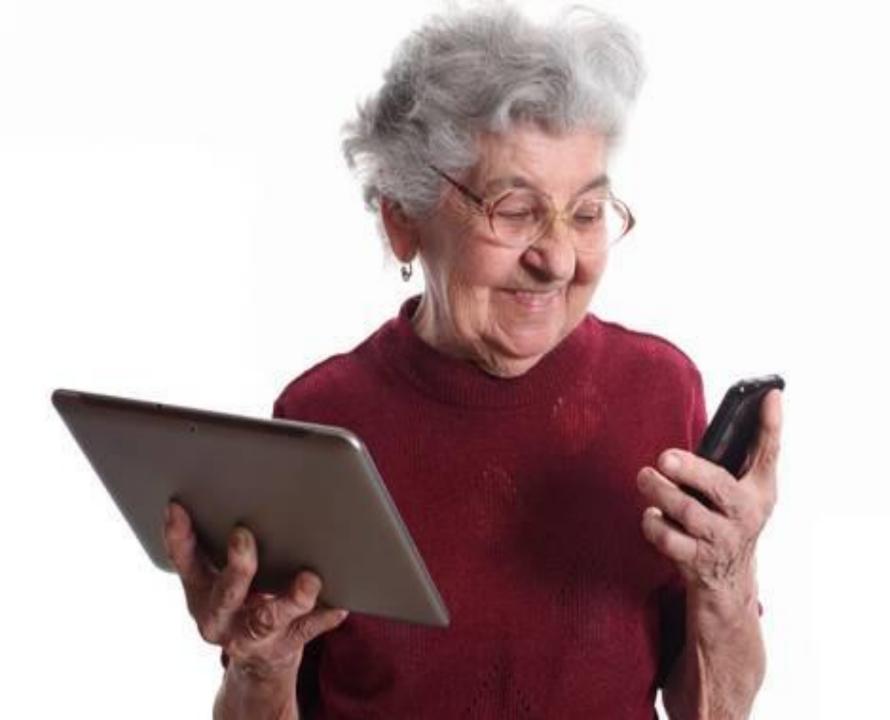
- 1. Food Safety
- 2. Animal Welfare
- 3. Nutrition & Health
- 4. Adverse Environmental effects

# Conventional media feeds off social media and vice versa





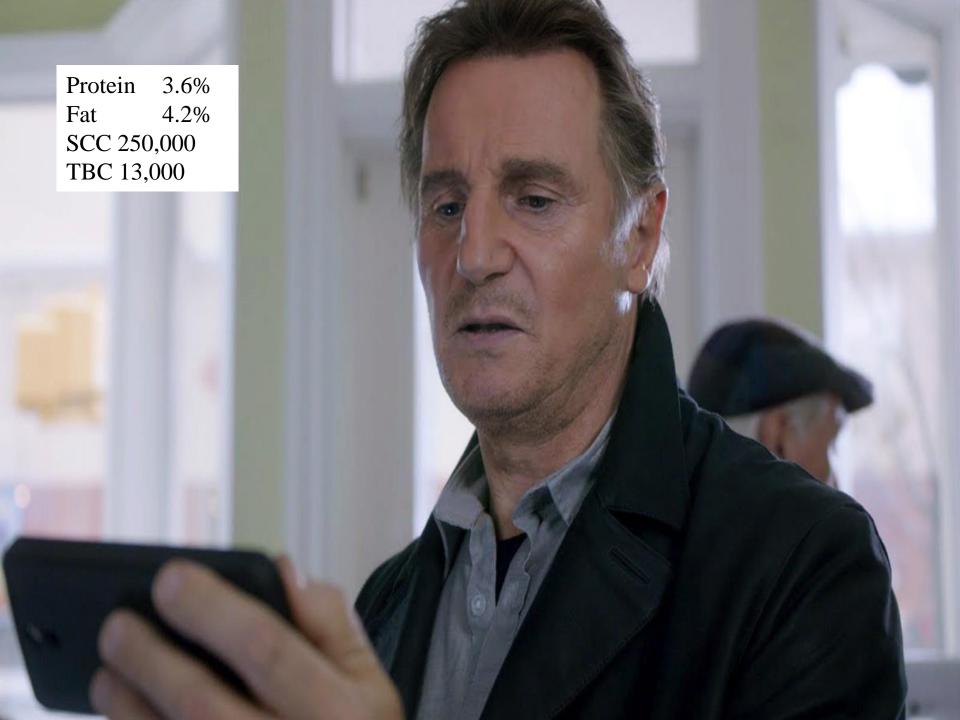


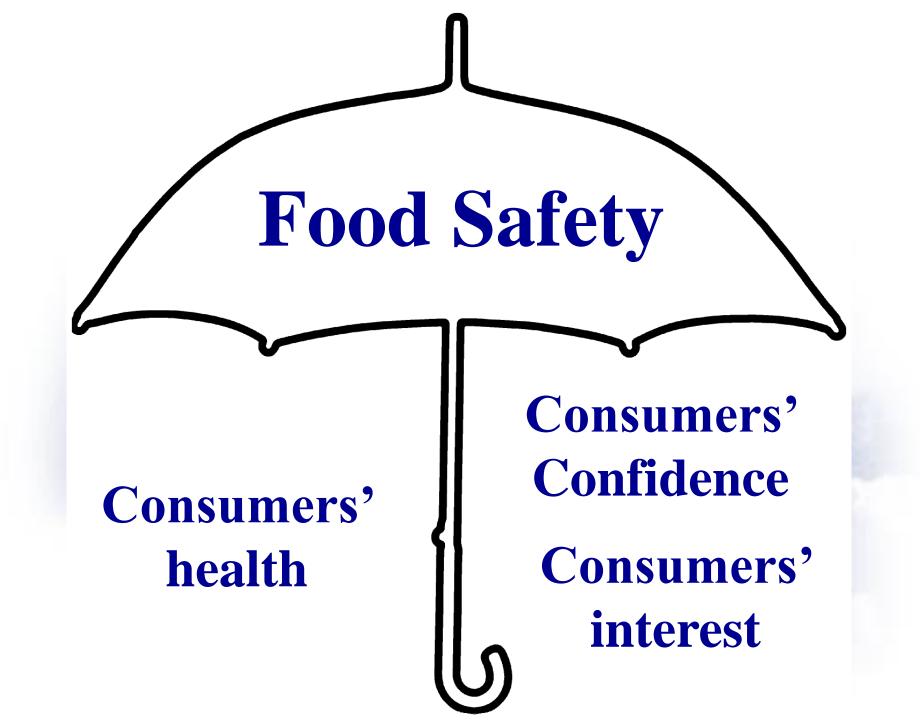






The next generation will access information in a different way than we do today





#### The Food Chain?



#### The Real Global Food Chain



# Could you find a needle a bale of hay in a field to prevent a cow choking on it?







The same occurs in food recalls making them extremely costly so the emphasis has to be on prevention

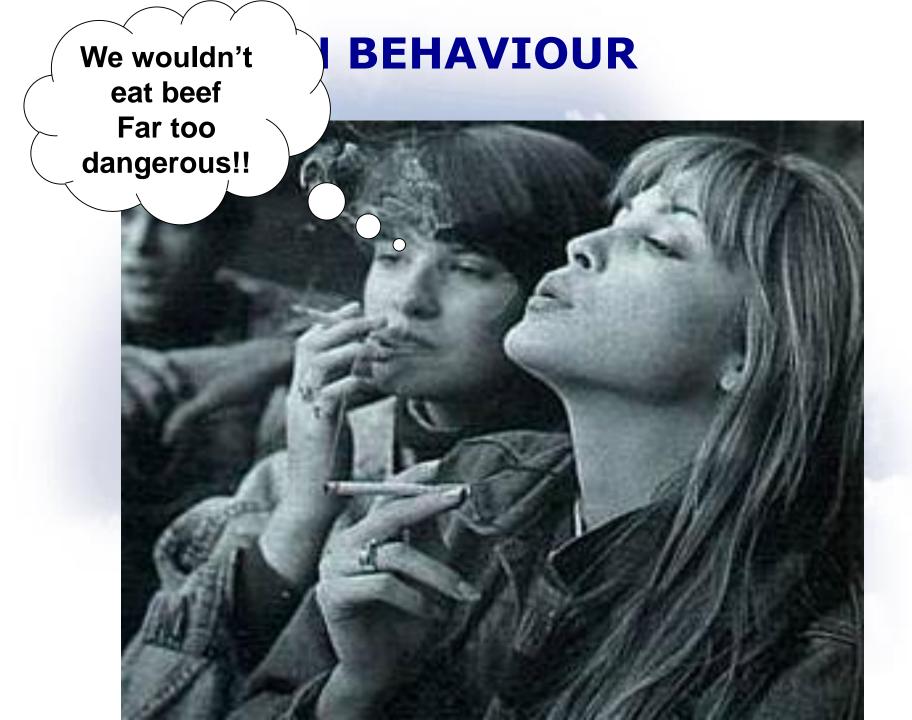
## Increasing ability of analytical chemists



#### Forensic Microbiology







#### Frozen blocks of "beef trim"?



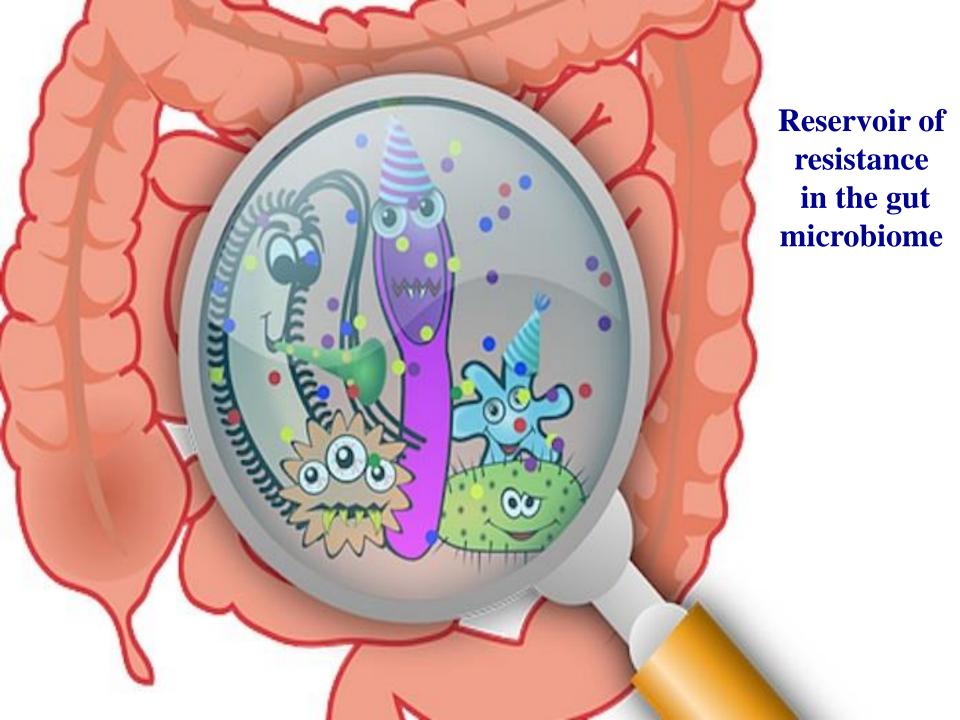
#### Set back to modernisation of meat inspection



#### Antibiotic resistant germs

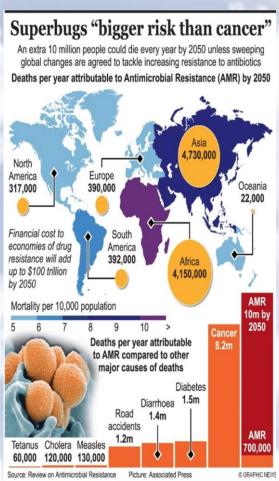


Pssst! Hey kid! Wanna be a Superbug..?
Stick some of this into your genome...
Even penicillin won't be able to harm you..!



## Antibiotic residues in Beef







Policy and industry response often in proportion to Media Coverage rather than risk to the public's health

#### **Antibiotics**



To ASSIST Good Husbandry – NOT Replace It...

### Global food service and retail giants are responding to consumer concerns and pledging to go antibiotic free!









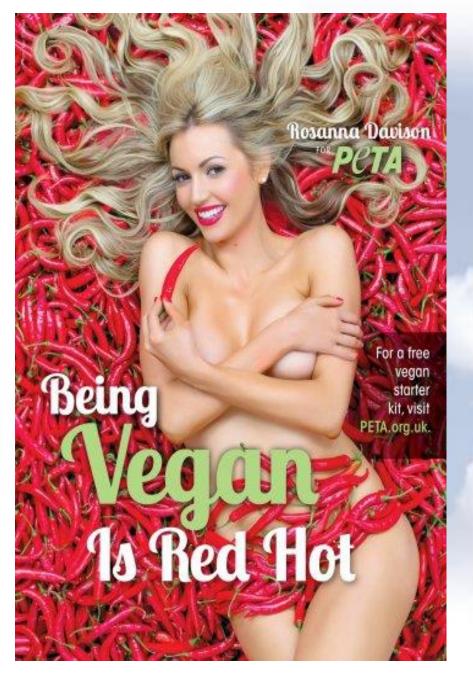




#### Pen-side tests – results in minutes Accurate timely diagnosis - better prescribing



right drug, right dose, right time









# DAIRY TAKES BABIES

FROM THEIR MOTHERS



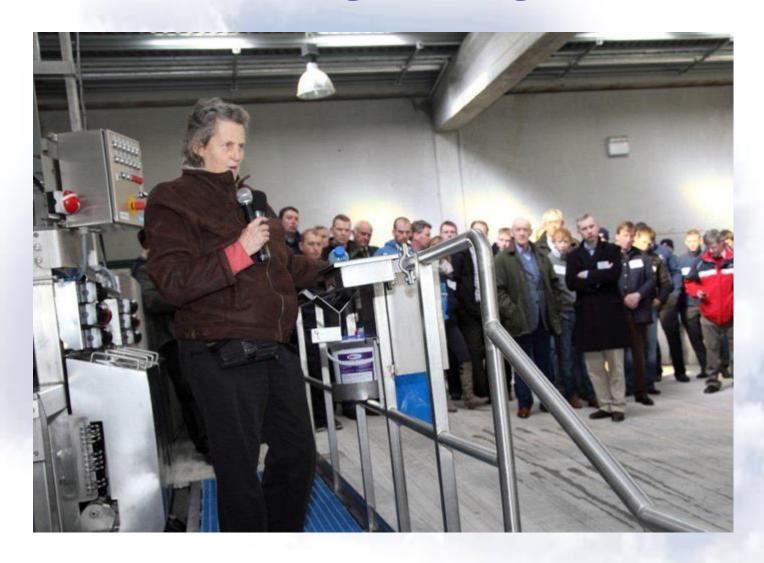
GOVEGANW RLD.



#### **Animal Welfare**



#### Lairage design

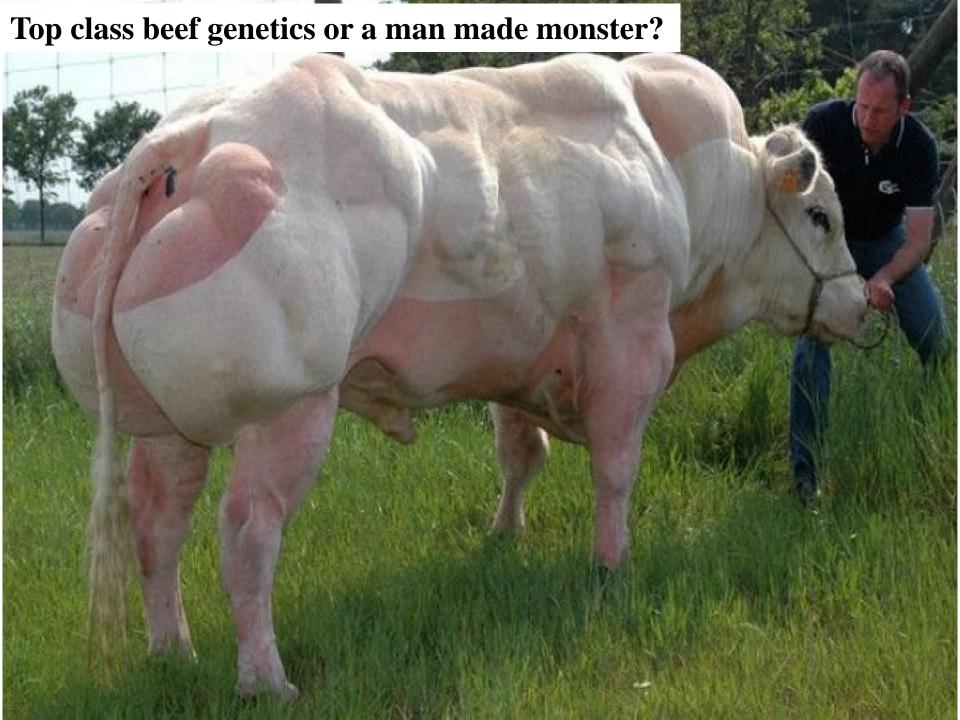


**Humanely Slaughtered?** 

#### Disconnect between urban consumers and modern Agriculture











### **Efficient Production?**



**Factory Farming?** 



#### **Bull Beef?**

## 30 months-16 months-12 months?



#### **Cull Cows & Animal Welfare**









#### **Social Media**

#### Truth Or Lies - Millions Will know in Seconds...



#### Special;- Gras

#### STEAK + BOURBON

#### **APPETIZERS**

Cleary Attrough Hours.

Freshis presured in Parks crumbs and served with rearted gartic hollandwise 1/3.50

SHICK BUADDINGS THAT PRAYERS

Sauteed New Orleans-style and served to an oversized. martini glass with Capan removiate 11.25

Manager Owner us no Hay Sent Fresh from Canada's Sunst ine Coast, Served raw with cucumber-best mignorette 12.25

#### SOUPS AND SALADS

Served with our famous setemory perfic breathficks

BOTTOM: Totallo & South Classes Sector Locally grown berkpore tomather with Mornig bless: chaese dress w g.7.75

Society Prop Centre

Greets, Asjou pears, crasherries, rowners intendist and randed pacers with black-gres mustant enegretta 5.75

COMP. CANUE.

Hand-out romaine hearty fossed with garlida to allow. Reggiano Parmesan and Spale ah white and better. Prepared tableside 7.75

FREIGH DWGH SOOF

Caramelized groups universel with beef broth, year stock and vermouth, topped with Swioi Emmertaler

More LORSON BYCKE

Lange churks of fresk lobster in a rich lobster stock blended with heavy creary lains with Cognar 9.50

Consumer Advicace Consumptional violence electronic position agas, or and references in sometime to be \$75 colors with more Reproductives from him special factor registered

#### ENTREES

All entrees served with oven-rocated segrons! vegetables and younn gold pateto collect with prime. freiche and chines

Button Western: Post Ceres With Payortis.

Twin boreless sirlain chops marinated in dijon, garlic and vermouth overright and served with parriseaned porcini much reams, merceno creem, and soubled Fink Lady applet 24,75

Tournation of Ball As Plant

Two 4 az tournedas, conted with crushed peppercores and pan seared. Topped with a green pappercorn, magnitudes, sha for seduction 28.75.

#### STEAKS

Served with previous regions reget ables and antitionalism in this party fraiche profichives

MANAGER SALING

14cc. A costs resoluted becomed with our house Bleed of Berbs and spaces 32.50

STORY YOU STATE

1200. The ting of steels, dry-aged in-house. Seasoned with our house blend of herbs and spices 28.95

Furt Month

But: Fortetender, well marbled fliet. Seasoned with our house blend of herbs and spices 28.95

Pompeous Stat.

20cs. The best of New York strip and tenderloin! Sessioned with our house blend of herbs and spices 31.95

STEAK ADDITIONS

Carametred Chions 1.50 | Soutiled Muskspare 2.50 Bles Chaese 1.00 | Seamstre Seace 1.00





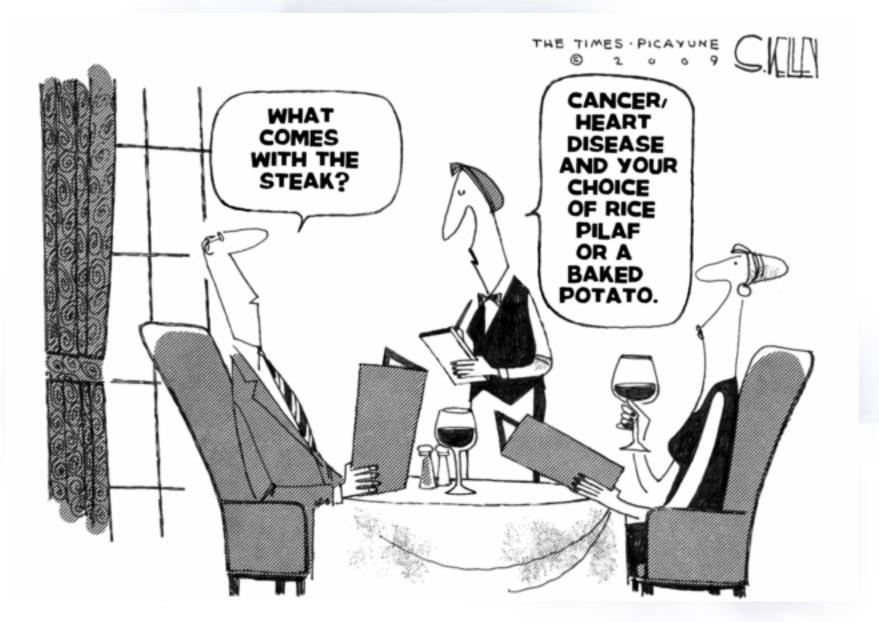
Change Your Diet & Get Your Life Back

## Grass versus Grain debate??



Flexatarian







Clean Up Your Arteries









#### Life stage nutritional needs: No one diet for all ages



# Life Stage Nutrition: What about humans?

- >From babies to grandparents
- >From active lifestyles to sedentary lifestyles
- > Males and females
- ➤ Identical nutritional requirements????

#### **Infant Nutrition**



#### **Toddler Nutrition**





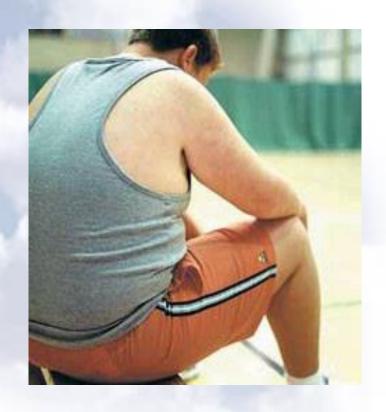
Rapidly growing Children



### Consumption patterns in Children?

Adverse effects of poor diet:- from "Dental to Mental"





## Creative marketing?







## Sedentary Middle Age

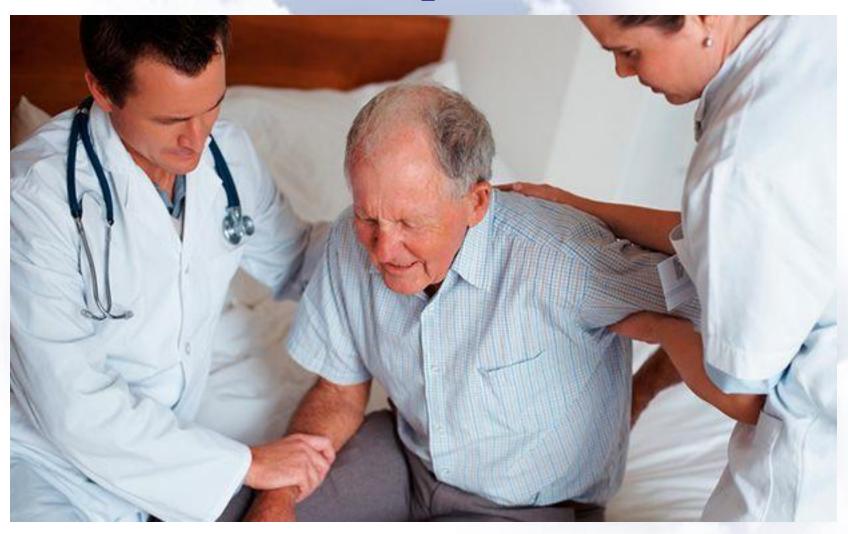




## Old age can be a great time...

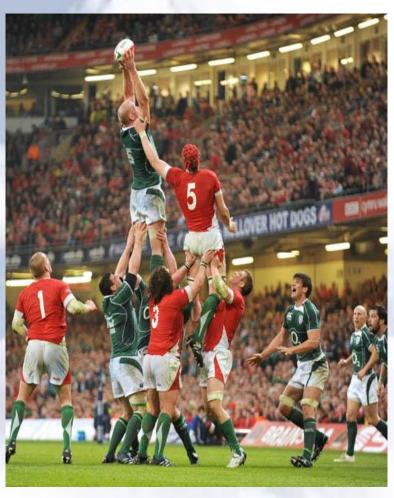


# Loosing muscle mass as you age:"Sarcopenia"



#### Bio-available protein:-





## Whey





# **Nutrition for Athletes**"Fueling your body for optimum performance"



### Dairy Industry V Beef Industry



#### **Ingredients industry**



- Casein
- Whey
- Lactose
- Lactoalbumen
- Lactoglobulin

"Milk Mining"



### **Bio-active ingredients**

- Oligosaccharides
- Prebiotics
- Lipid profiling
- Glyco-conjugates
- Immune modulators



### 60 is the new 30



# 90 is the new 60!







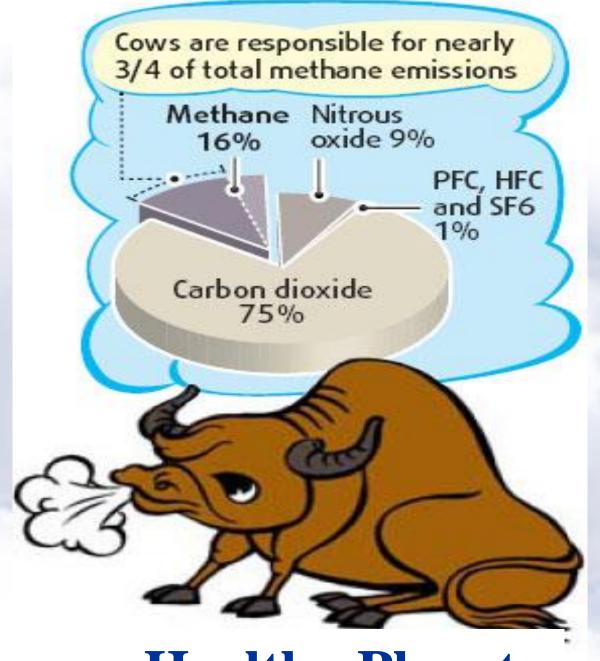
# Could the Beef industry plant where the Dairy Industry is ploughing?



### Nutrition in the Elderly...



Two 80-g servings/day of lean meat – Daly et al. Am J Clin Nutr 2014;99:899–910.



**Healthy Planet** 





## **Environmental Impact**





## **Environmental Impact**





## Final take home message



You are in the Human
Health
Business!

