



# Addressing the risk of having no customers



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**Deputy Director**  
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**<http://www.ucd.ie/foodandhealth/>**



A black and white cow stands in a lush green field. In the background, there is a stone house with a chimney and a large green barn. The sky is blue with light clouds. A thought bubble is positioned in the upper right corner of the image.

**C is  
for  
Cow!**

# **© Criteria critical for success**

- 1. Confidence**
- 2. Competitive**
- 3. Creative**
- 4. Collaboration and cooperation**
- 5. Compliance**
- 6. Credit**

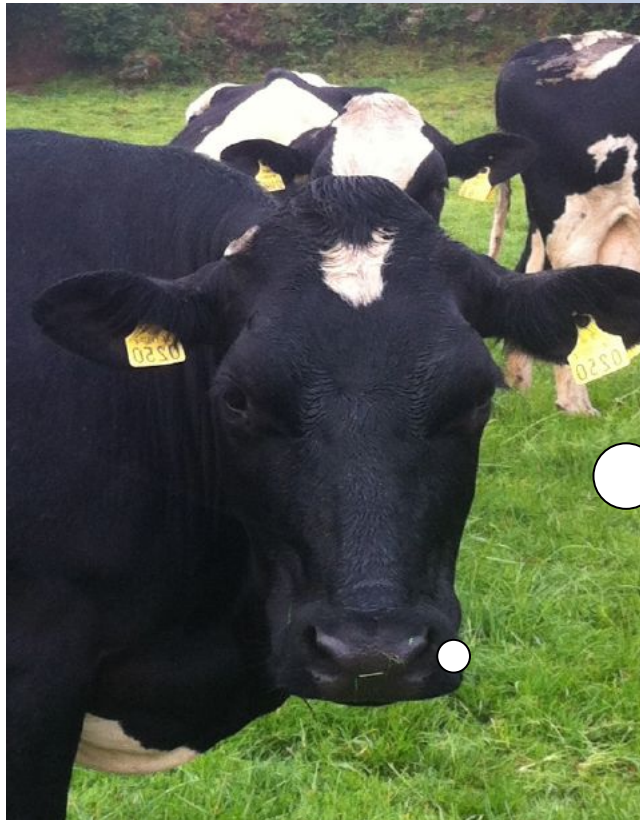
# The Future is looking Good

Provided we  
can avoid  
adverse  
publicity

○  
**1. Food Safety**

○  
**2. Animal Welfare**

○  
**3. Nutrition & Health**



A long conference room with a large wooden table and purple chairs. The room has a drop ceiling with recessed lights and a wall-mounted air vent. The walls are light-colored, and there are wooden doors at the far end of the room.

## **Risk Management**

**Are these on the Agenda?**

- 1. Food Safety**
- 2. Animal Welfare**
- 3. Nutrition & Health**

# Food Safety is not a gamble

## Core Function of Company Leaders





Dairy products, including infant formula, were withdrawn in more than seven countries in August after Fonterra suspected that 38 tonnes of whey protein had been contaminated with a botulism-causing bacterium



# Dairy giant at the heart of toxin scare

## Total New Zealand merchandise exports



## Total Chinese imports of milk powder



## Annual turnover of Fronterra



## Fonterra facts

22 billion litres of milk collected each year

10,500 farmer-owners

16,000 employees around the world

## Batch of contaminated whey exported to



## Fonterra Shareholder Fund slumps



Sources: NZTE, Fonterra, Yahoofinance.com \*US\$=NZ\$ 1.29



# Definitive typing of microbes

**Farmers/  
Millers**



**Patient**



**Food**



**Processors**



**Retail/Catering  
outlet**



# Conventional microbiology:- too slow



# Increasing ability of analytical chemists



**HR-MS:-Finger print the chemicals**

# 2008:- Global recall of Irish Pork...



Irish pork  
super  
460 x 2



Irish pork as  
1k in



Tainted Irish pork may be in  
25 ...

350 x 215 - 17k - jpg

[www.chinadaily.com.cn](http://www.chinadaily.com.cn)



Irish pork dioxin  
'made ...

460 x 288 - 24k - jpg

[www.telegraph.co.uk](http://www.telegraph.co.uk)



Total Irish pork-products recall

363 x 299 - 14k - jpg

[www.mercopress.com](http://www.mercopress.com)



# Editorial

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# IRISH FARMERS JOURNAL

## Time to heed warnings on illegal milk trading

In our 26 October edition, we warned farmers that it is a very serious offence to sell milk to a non-approved purchaser.

It has now emerged that a lorry was detained in the Newry/Armagh area two weeks ago with milk believed to have been imported illegally from the Republic of Ireland.

The details of what actually took place are scant, but it under-

concerns that the milk travelling north could be contaminated after being transported in non-specialist equipment, there is also the issue of traceability. Ultimately, the reputation of the dairy industries north and south is at stake.

### Over quota

At the end of October 2013 the Republic was 0.9% over quota; this is

# Food Grade Containers???

Over Quota? Avoid the super levy



# Hygiene, Animal Health & SCC





# Are we using accredited Laboratories?



# What is the real health status of our national herd?

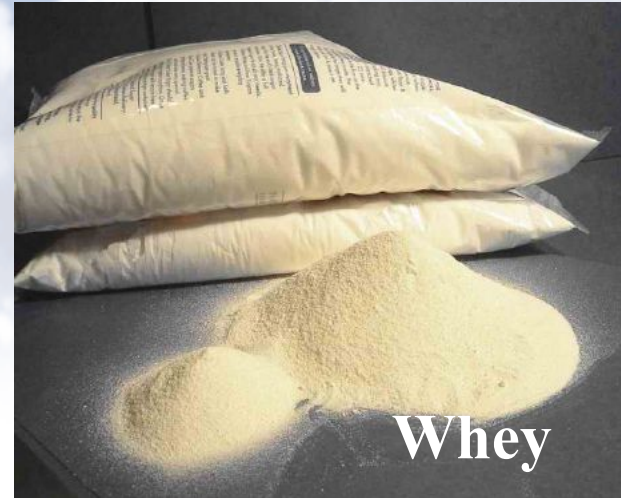
**IBR**  
**BVD**  
**Leptosporosis**  
**Salmonella**  
**Neospora**  
**Johne's**



# The Food Chain ?



# Traceability to the farm?



# **The Real Global Food Chain**



**Precisely tracing milk & ingredients impossible**

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



# YES



Recall all the bales

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

# Safe Feed is Essential





# Globally Sourced Feed



# ARSENIC CONTAMINATION



# Getting a representative sample ??



**How many 25gm samples to deem  
this shipment safe?**



# Risk Based Sampling

**Good Agricultural Practice**

**Process Controls**

**Sampling at loading**

**Composite samples**



# Issue: bio refineries rather than breweries



**Distilled Dried Grains from Biofuels?**

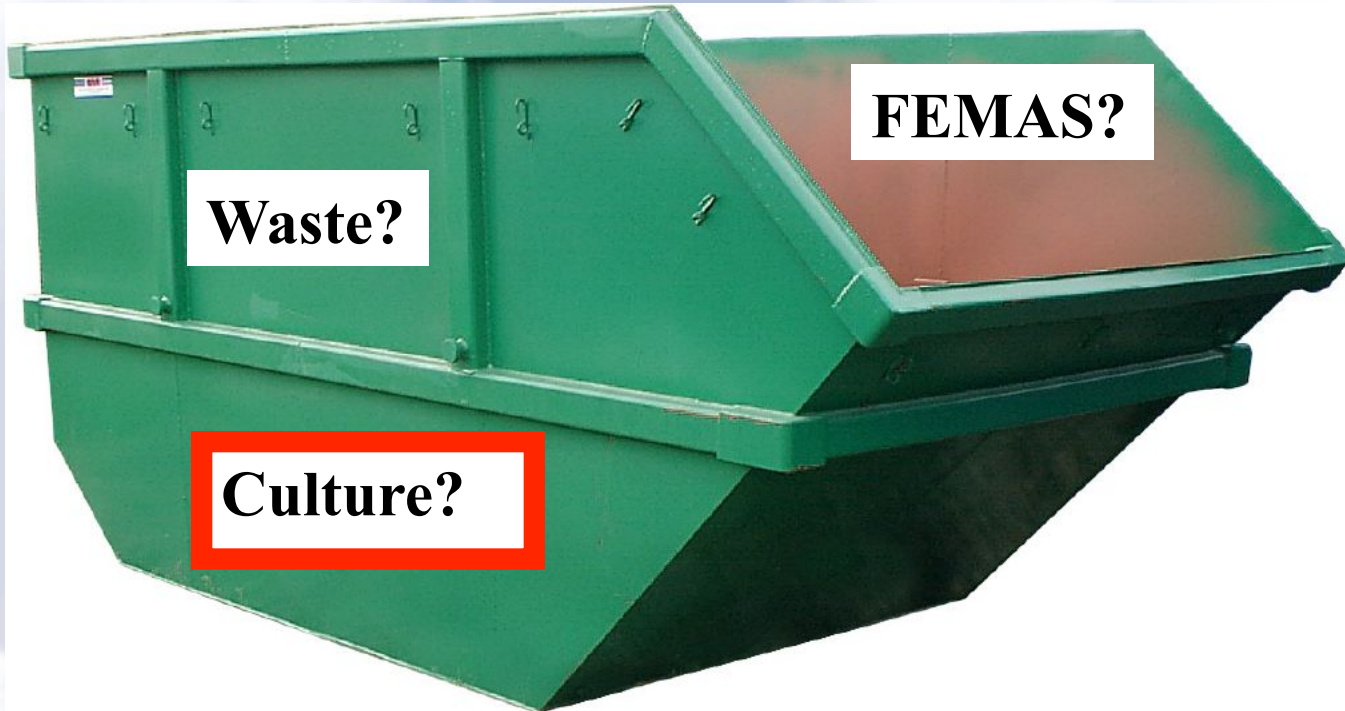
**Harmful residues?**

**Culture?**

# By-products of Bio diesel production and Recycled “Waste” oil Culture?



# Issue: “Recycled human food”



**Legitimate use if properly  
handled**



# Issue: Sludge- Residues?



# Issue:-On Farm mixing



Or  
Industrial  
scale  
mill  
?

# Feed Safety Quality Assurance Systems



**FAMI**QS



**FEED  
&  
FOOD**  
Safety



**Equivalence and common understanding improves safety.**

**“Explain to our viewers why you sold contaminated product?”**

**It wasn't us!  
It was one of  
our  
suppliers!**



**Chairman Plc**

**Your brand is as secure as the standards of your weakest supplier**

**Ask yourself one question every day?**



**..would you TRUST your suppliers to pack your parachute?**

# Who are your key staff?




**Asset or liability?**

# Early Warning

**Would you share your results with your competitors?**

**Industry sharing results of audits & private testing with each other and with the regulators**



**“It’s a matter of trust”**

# Frozen blocks of “beef” trim?



**Identified in  
imported Polish  
beef trim by one  
Irish company  
6 months before the  
Crisis**

**Did they alert their  
competitors or the  
regulators? NO**



# Efficient Production?



# Factory Farming ?



# Animal Welfare

- **"small is good and big is evil"**
- **it's not the size of the farm, but the way that it is managed, that is important.**

# Animal Welfare



# What your “future customers are watching !



**Over 7,500,000 hits in 8 weeks**

# Antibiotics



**To ASSIST Good Husbandry – NOT Replace It...**

# Connecting with your customers



AGRI AWARE



**"Casein is the most  
relevant cancer  
promoter ever  
discovered."**

**Dr. T. Colin Campbell,  
author of The China Study**





# MILK

## The Deadly Poison



by  
**Robert Cohen**  
foreword by Jane Heinlich

# Don't Drink Your MILK!



Frightening  
Medical Facts  
About the World's  
Most Overrated  
Nutrient

Frank A. Oski, M.D.



**got sick kids?**

Drinking milk contributes to colic, ear infections, allergies, diabetes, obesity, and many other illnesses.

For alternatives to dairy products, call 1-888-VEG-FOOD or visit [DumpDairy.com](http://DumpDairy.com)

**PETA**

The truth about

**MILK**



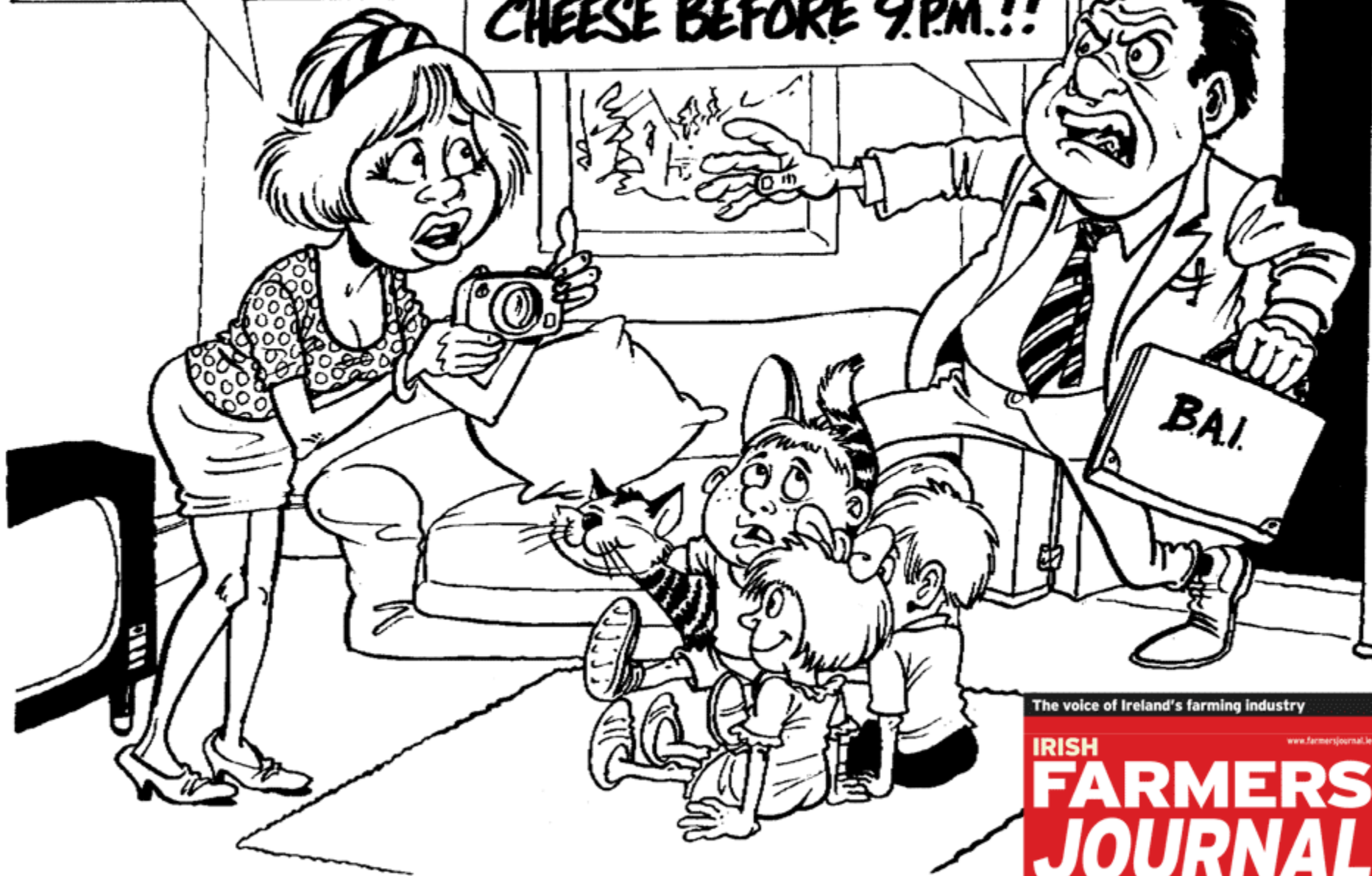
**and it's not  
the Methane!**

# Cheese is unhealthy food for kids??



SAY CHEESE!

NO!! YOU CAN'T SAY  
CHEESE BEFORE 9.P.M.!!



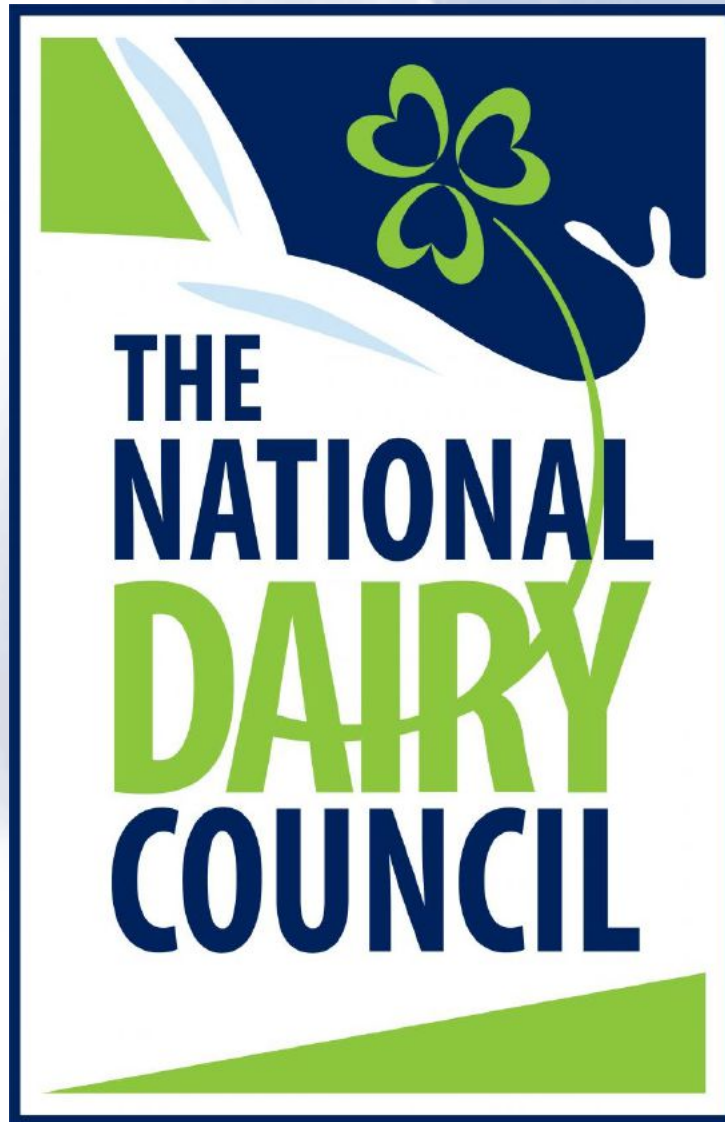
The voice of Ireland's farming industry

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**IRISH  
FARMERS  
JOURNAL**

# Allergies?





## **Genetics**

**Modify the composition of the milk by the genetics of the cow and the rations fed**

## **Cow Nutrition**

# **Advanced animal nutrition for improve food conversion efficiency and milk yield**



**Now  
advanced animal nutrition for the  
benefit of human health**



# 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

**I think  
I'll be a dairy  
farmer when I  
grow up!**



# Rapidly growing Children







# PEPSICO

**Global Nutrition Group  
Performance with Purpose**



01 F2  
01 B2

05.04. 10:01 F2  
05.15. 10:01 B2



우양팡200ml  
100ml당 가격 350원



05.15. 23:39.8  
견양선



아인)베이비185ml  
100ml당 가격 373원



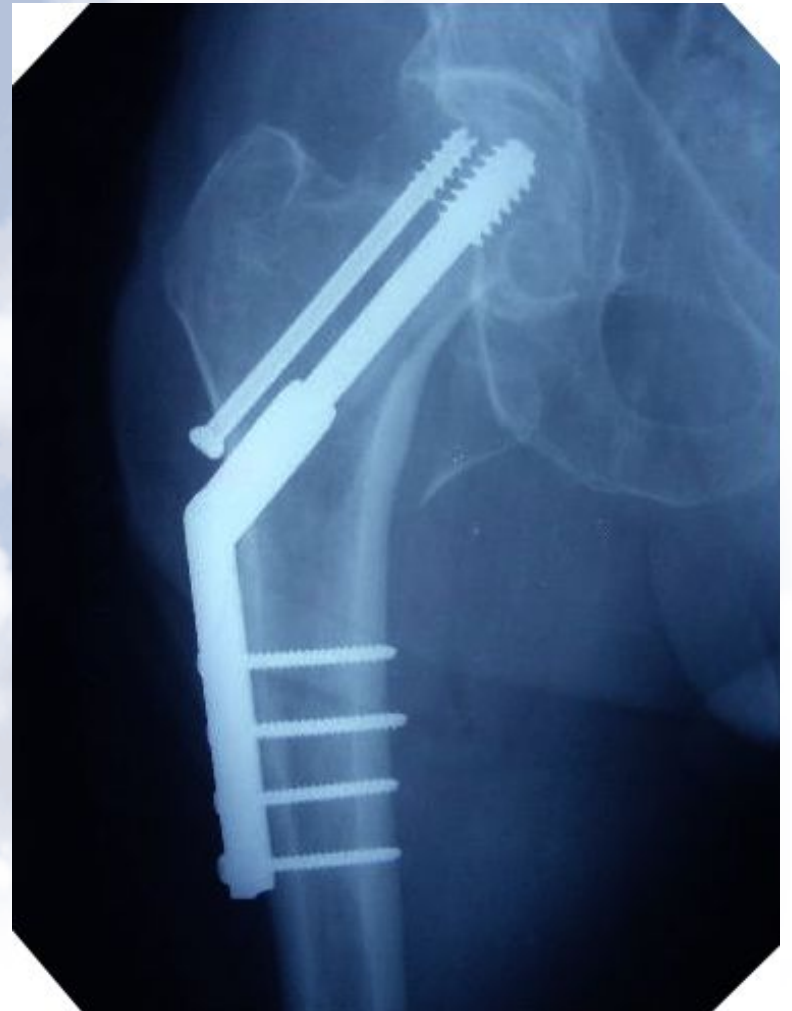
600



05.15. 23:39.8  
견양선



# **Bone Mass is a key determinant of Fracture risk**





# Old age can be a great time...



**If you are healthy!**

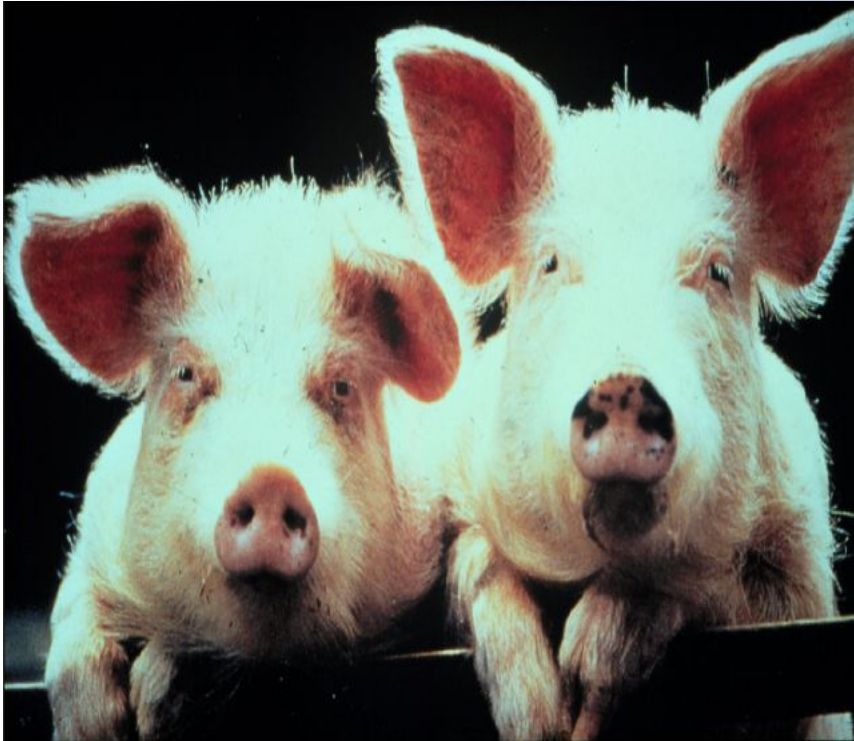
# Loosing muscle mass as you age:- “Sarcopenia”



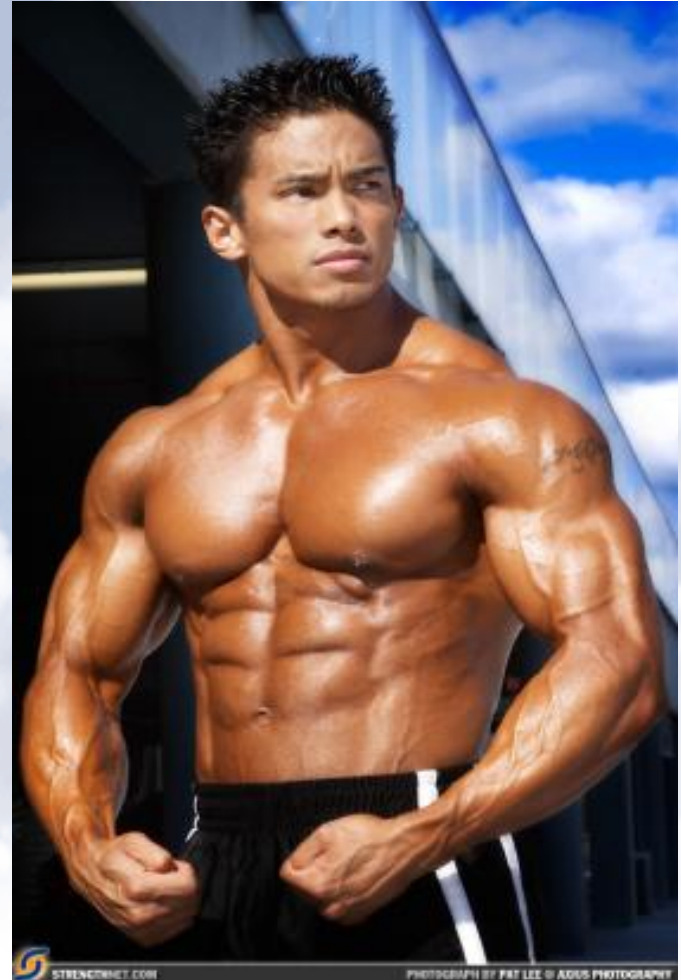
**We have a product that can slow down  
the aging process**



# Bio-available protein:-



# Whey



# Nutrition in the Elderly...



**It's the whey**

**60 is the new 30!**



**90 is the new 60!**

# Media amplifying risk....

**Deadly  
Pesticides in  
infant formula**



**Dramatic  
increase in  
Milk Allergies**





# Social Media

**Truth Or Lies – Millions Will know in Seconds...**



**Fill that space with  
SOMETHING!!!**



**Producer**

**Journalist**

**Is it more important to be first  
with the story that to be 100% correct?**

# **2011 Bean sprouts outbreak**

**3,950 confirmed cases and 53 deaths**

**Spanish cucumbers were wrongly implicated**

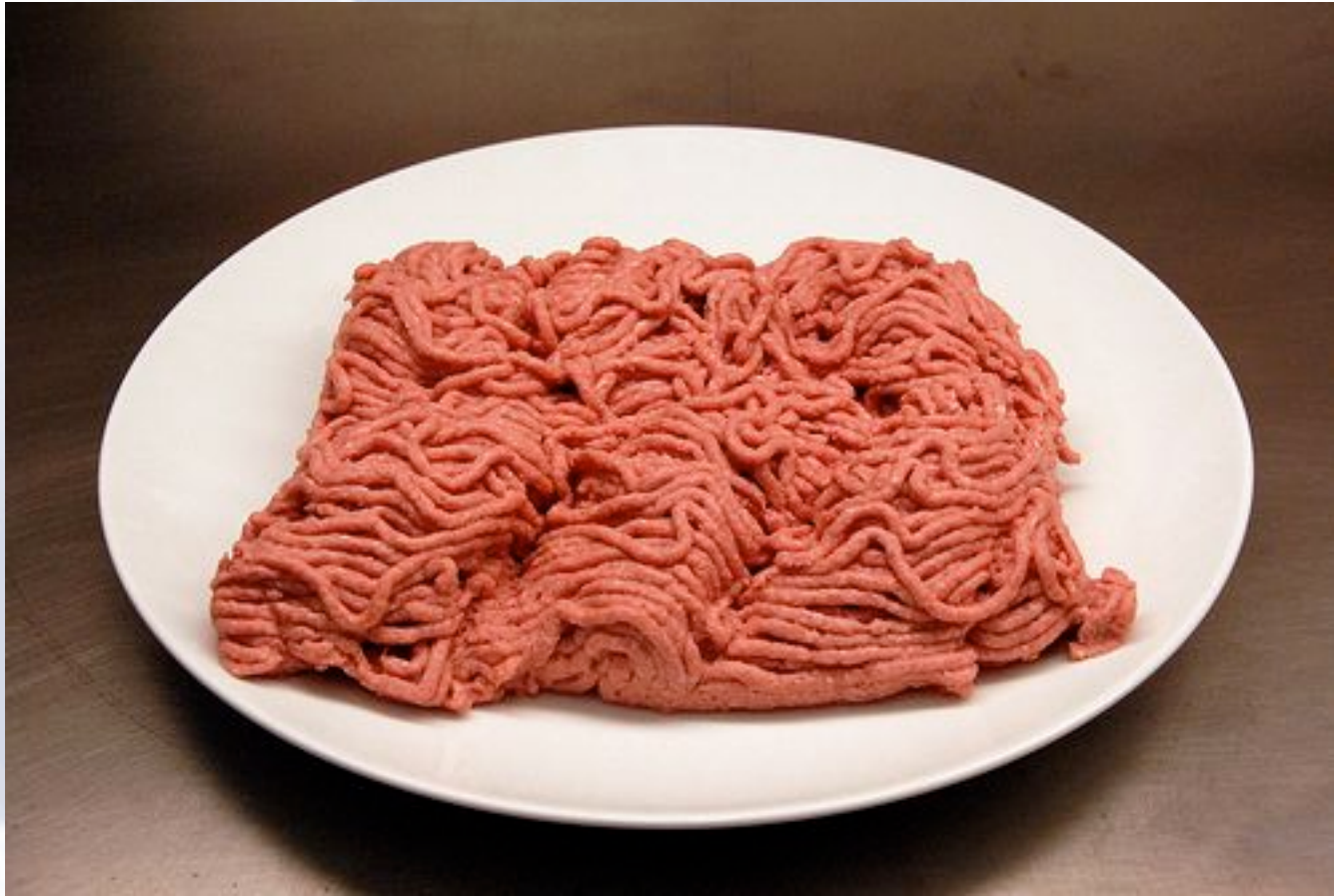


# If a picture paints a thousand words, what could a YouTube Clip do?



**2012- lean finely textured beef – mechanically deboned**

# **“Lean Finely Textured Beef”**



**Perfectly legal:- but media killed off  
the entire industry**

# 2012

## Toxic chemical in meat:- Ammonium hydroxide



### **Victory for Jamie Oliver in the U.S. as McDonald's is forced to stop using 'pink slime' in its burger recipe**

- TV chef was disgusted to discover ammonium hydroxide was being used by McDonald's to convert fatty beef offcuts into a beef filler for burgers
- 'Why would any sensible human being want to put ammonia-filled meat into their children's mouths?' asked Jamie Oliver
- McDonald's denies its hand had been forced by TV campaign

**“It is too late to  
build the  
Arc when you  
here the  
Thunder!”**



# Farmers are the first step in the food chain





# Irish Farmers are different



# **Final take home message**

**You are in the  
Human  
Health  
Business!**

