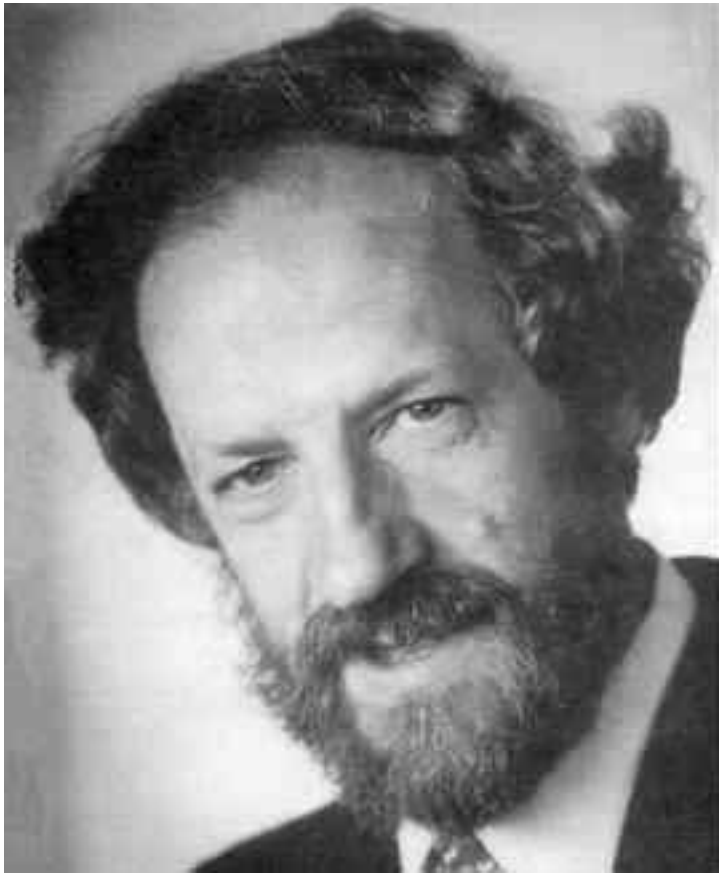
Terry Wall – the applied mathematician

(Or the Terry Wall Law of Stacking the Fridge)



The Choice of a Bowl

- If, at the end of a meal, food remains in any quantity it must be stored in a small bowl in the fridge
- That bowl must be of **exactly** the right size
- It should be possible to estimate the bowl size without recourse to a measuring device. If you get it wrong we may need to transfer into a second dish and so waste dishwasher space……..

Too Full

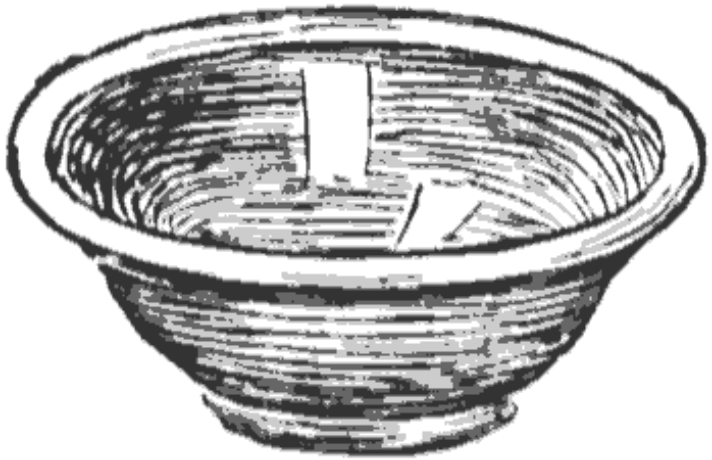
Too Empty

The real world problem

- This is a simplistic explanation for novice fridge-stackers (and mathematician). In addition to the choice of bowl other points must be considered:
  - Food-type separation (puddings, cooked meat, raw meat,vegetables and dairy)
  - The use of stackable containers
  - The shape and size of other items in the fridge (to be assessed without resort to a measuring device)

The Wall Law Of Stacking The Fridge Assessment (Beginners)

What is wrong with this bowl for fridge-stacking?



Answers in writing

(1st Prize – small bowl of leftover baked beans)

The Wall Law Of Stacking The Fridge Assessment (Advanced)

What is the wasted fridge space f if using a bowl diameter x, height z, optimal bowl diameter d, fridge shelf height h, fridge shelf area a.b

Other items on fridge shelf:

Rectangular (2 items, dimensions c.d.e : g.i.j)

Bowls (3 items diameter and height k,l : m,n : o,p)

Would a bowl with a cylindrical surface area fit the available space better?

Is your answer different if the rectangular items have rounded corners?

REMINDER – NO MEASURING TOOLS TO BE USED

(1st Prize – tin of unopened baked beans)

The Wall Law Of Stacking The Fridge Assessment - Warning

- If the theory is taken to its logical conclusion, you need bowls of many different sizes
- Terry and Sandra have had to extend their kitchen in order to accommodate all of the bowls!