# Inactivity 'no contributor' to childhood obesity epidemic

July 7 2010

A new report from the EarlyBird Diabetes Study suggests that physical activity has little if any role to play in the obesity epidemic among children. Obesity is the key factor behind diabetes, heart disease and some cancers.

EarlyBird is based at the Peninsula Medical School in Plymouth, UK, and has been observing in detail a cohort of city school children for the past 11 years.

A review published in 2009 of all trials using physical activity to reduce childhood obesity showed weight loss amounting to just 90g (3oz) over three years, and the EarlyBird study wanted to know why the trials were so ineffective. So they challenged some popular paradigms.

It is well known that less active children are fatter, but that does not mean - as most people assume it does - that inactivity leads to fatness. It could equally well be the other way round: that obesity leads to inactivity.

And this is the question EarlyBird was uniquely placed to answer. With data collected annually over several years from a large cohort of children, it could ask the question - which comes first? Does the physical activity of the child precede changes in fatness over time, or does the fatness of the child precede changes in physical activity over time?

And the answer, published recently in *Archives of Disease in Childhood*,

was clear. Physical activity had no impact on weight change, but weight clearly led to less activity.

The implications are profound for public health policy, because the physical activity of children (crucial to their fitness and well-being) may never improve unless the burgeoning levels of childhood obesity are first checked. If this cannot be achieved through physical activity, the focus has to be on what - and how much - children consume.

EarlyBird has already shown how the trajectory leading to obesity is established very early in life, long before children go to school, and how most childhood obesity is associated with obesity in the same-sex parent.

While portion size, calorie-dense snacks and sugary drinks are all important contributors, early feeding errors seem crucial - and physical activity is not the answer.

Provided by The Peninsula College of Medicine and Dentistry