

# INFLUENCE OF SOCIAL CIRCUMSTANCE IN CHILDHOOD, ADULTHOOD AND SOCIAL MOBILITY ON ADULT DIETARY QUALITY.

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**BACKGROUND:** The impact of childhood socio-economic position (SEP) on adult dietary intake is not well understood, and has had conflicting associations. This study examines the influence between childhood SEP, adult SEP and change in SEP over time on diet quality in adulthood.

**METHODS:** In 1985, the Australian Schools Health and Fitness Survey enrolled 8,498 school aged children to complete demographic surveys. During a follow-up in 2004-2006, 5,170 participants of the original sample were enrolled into the Childhood Determinants of Adult Health Study. During the study 3,967 participants aged 24-36 years old completed food frequency and sociodemographic questionnaires. Within the food frequency questionnaire, participants were asked to estimate their intake of 127 food and beverages over the last year with one of nine options ranging from never or less than once per month, to six or more times a day. Estimated intake was then converted to daily equivalents and scored against a Dietary Guideline Index (DGI) based on national recommendations. Higher scores indicated a greater adherence to an ideal diet, with a maximum score of 150 points. Participants' DGI scores were then compared to their childhood SEP variables, adult SEP variables, and SEP mobility over the 19 years.

**RESULTS:** After adjusting for adult age, marital status and area of residence; we found that participants from the lowest childhood SEP, based on level of residential disadvantage, parental level of education and parental occupation, had a DGI score up to 5.3 points lower than participants from the highest childhood SEP. This association between childhood social circumstance and adult dietary intake has been previously described<sup>1</sup>. However, adult SEP, based on level of residential disadvantage, participant's level of education and participant's occupation, had a greater impact on DGI score than the childhood variables. Participants from the lowest adult SEP achieved DGI scores up to 8.4 points less than those from the highest SEP. Adult SEP as a greater contributor to diet than childhood SEP has been described in previous study<sup>2</sup>. Furthermore, participants who achieved a higher SES than their parents had a quality of diet comparable to participants who maintained the highest SES as their parents.

**CONCLUSION:** While childhood social circumstance remains a contributor to quality of diet in adults 19 years late, adult socio-economic position and improvement in socio-economic position from childhood to adulthood has a greater impact on adult dietary quality. This study indicates that interventions to improve diet quality could be aided by targeting younger populations, particularly those from lower socio-economic communities<sup>3</sup>.

## REFERENCES:

1. Lynch JW, Kaplan GA, Salonen JT: Why do poor people behave poorly? Variation in adult health behaviours and psychosocial characteristics by stage of the socioeconomic lifecourse. *Soc Sci Med.* 1997 Mar;44(6):809-19.
2. Hare-Bruun H, Togo P, Anderson LB, Heitmann BL: Adult food intake patterns are related to adult and childhood socio-economic status. *Nutr.* 2011 May;141(5):928-34.
3. Maynard M, Gunnell D, Ness AR, Abraham L, Bates CJ, Blane D: What influences diet in early old age? Prospective and cross-sectional analyses of the Boyd Orr cohort. *Eur J Public Health.* 2006 Jun;16(3):316-24.