**The association between personality, self-regulation of eating behaviours and diet in adults with type 2 diabetes**

**Background & Aim**

Eating intentions can be overridden by the demands of family/social/work life and the influences they have on our emotional states, including emotional eating. Self-regulating and maintaining intentions can be demanding but is an important factor in healthy eating. Living with type 2 diabetes (T2D) can amplify these demands through the experience of diabetes distress and self-efficacy levels. Personality traits may be proximal to a person’s ability to self-regulate and consume a healthy diet. This study aimed to examine the associations between personality, psychological factors, self-regulation and diet, among adults with T2D.

**Methods**

Australian adults with T2D (N=270; 56% women; age: 61±12 years) were recruited via the national diabetes registry. An online survey included measures of: dietary intake (UKDDQ), self-regulation of eating behaviours (SREBQ), personality (HEXACO-PI-R), diabetes distress (DDS) and diabetes self-efficacy (DMSES). Analyses included bivariate correlations and linear regression, adjusted for demographic and clinical variables, personality and psychological variables.

**Results**

Healthy eating correlated most strongly with self-regulation (*r*=.43) and diabetes self-efficacy (*r*=.36), while self-regulation correlated most strongly with diabetes self-efficacy (r=.62) and diabetes distress (*r*=-.46). Of the personality traits, self-regulation correlated most strongly with extraversion (*r*=.33) and emotionality (*r*=-.31). In the regression analyses, controlling for covariates, the final model (self-regulation) explained 24% of the variance in diet quality (Adjusted R2=.24, R2 difference=.06, p=<.001; self-regulation: β=.34, p=<.001, honesty-humility: β=.20, p=<.001, extraversion: β=.16, p=<.05, age: β=.15, p=<.05).

**Discussion/Conclusion**

Personality is cross-sectionally associated with eating behaviours through its relationship with self-regulation. This may offer a different lens when viewing personal intentions to consume a healthy diet. Certain personality traits may play a role in those who experience emotional eating together with the psychological processes associated with efforts to self-regulate eating behaviours. Further research is needed to examine these relationships prospectively and potential mediating factors.