

### AMD and Diet

**Ruth Hogg** 



# Epidemiological evidence from dietary analysis

- Lutein and Zeaxanthin (AREDS 1, BMES, CAREDS)
- Zinc (BMES)
- PUFA's/Fish Oils(BDES, EUREYE)
- Vit C and E
- High saturated fat risk factor





#### Supplementation Evidence

AREDS 1 and AREDS 2

Cochrane review concludes:

"People with AMD may experience delay in progression of the disease with antioxidant vitamin and mineral supplementation. This finding is drawn from one large trial conducted in a relatively well-nourished American population."





#### Protective Dietary Patterns

- Low Glycaemic Index diet (Allen Taylor et al,
- Adherence to US 2005 Healthy Eating Index (CAREDS study)
- Oriental pattern vs Western (AREDS, Chiu et al, 2014)
- Pattern high in fruits, veg, chicken and nuts and low in red meat (MCCS, 2014)





#### Novel associations

- Folic Acid, pyridoxine and cyanocobalamin supplementation?
- Saffrom (carotenoid crocin and crocetin, Flasini et al, IOVS 2010)





## Current issues or where controversy still exists:

- Clarification regarding detrimental nutrients (B-carotene, BMES data 2008)
- Role of trace elements (Zinc, iron etc, Calcium BMES data, Copper)
- Vit D (CAREDS).
- Interaction between fat soluble micronutrients and circulating lipoproteins. (Connor, 2007)
- Role of long-chain PUFAs (Liu et al, 2010)
- Diet/ Gene interactions (Ho et al, 2011 Rotterdam study, CFH and GI)
- Alcohol and AMD (MCC show modest association) Well characterised in UKBB
- Dietary supplements (Fish oils, ginkgo biloba etc)

