

INTAKE OF VEGETABLES, FRUIT AND FISH IS BENEFICIAL FOR AGE-RELATED MACULAR DEGENERATION (AMD)

among
4 202
>55 YEARS

PARTICIPANTS



754
developed
advanced incident
AMD

ROTTERDAM STUDY

Examinations followed up for 9.1 ± 5.8 years

FREE OF AMD AT BASELINE

DIETARY DATA WERE COLLECTED USING A VALIDATED 170-ITEM FOOD FREQUENCY QUESTIONNAIRE

GENERAL DIETARY GUIDELINES FOR A HEALTHY LIFESTYLE ARE ASSOCIATED WITH A REDUCED RISK OF AMD



Nutrients with antioxidative properties, such as lutein and zeaxanthin, zinc, vitamins C and E, and the polyunsaturated omega-3 fatty acids, have been shown to reduce risk of developing AMD

VEGETABLES



≥ 200 g/day

FRUITS



≥ 2 x /day

FISH



≥ 2 x /week

In particular, intake of fish was associated with a reduced risk of incident AMD by **24%**

A DIET OF 200 GRAMS PER DAY OF VEGETABLES, FRUIT 2 TIMES/DAY AND FISH 2 TIMES/WEEK IS ASSOCIATED WITH A SIGNIFICANTLY REDUCED RISK OF AMD



But intake of the recommended amounts of all 3 food groups was achieved by only **3.7%** of the study population

INTAKE OF VEGETABLES, FRUIT AND FISH IS BENEFICIAL FOR AGE-RELATED MACULAR DEGENERATION
De Koning-Backus and al. Ophthalmology. 2019 Feb;198:70-79.
doi: 10.1016/j.ajo.2018.09.036.



THE EXPERT'S OPINION - ISABELLE AKNIN

OPHTHALMOLOGIST GOLFE-JUAN, FRANCE

This analysis of the Rotterdam Study population once again shows the favorable impact of nutrition on the prevention of ARMD. These results can be compared to those published on the AREDS population. In recently published studies, it was shown that a Mediterranean diet could (1) reduce the incidence of late ARMD by 20%, and (2) in the case of preexisting ARMD, slow its progression by 40%. Here the base population was different, having no sign of early ARMD at the outset. However, we still found the preventive effect of some simple rules that are common to all these reports: eat at least 200 g of vegetables per day, 2 fruits per day and fish twice a week. This protective effect acts at early stages, and even before the first signs of the disorder. "It's never too soon nor too late to eat carefully".

1 Merle BM et al. Ophthalmology. 2019;126(3):381-390.

2 Merle BM et al. Am J Clin Nutr. 2015;102(5):1196-1206.

THE EXPERT'S OPINION - HELEN BOND

STATE REGISTERED DIETITIAN WITH 23 YEARS' EXPERIENCE IN FOOD, DIET AND ITS RELATIONSHIP TO HEALTH, UK



Fruit and vegetables, and fish (especially oil rich species) are important components of a healthy diet and numerous studies show their sufficient daily consumption could help prevent major diseases, such as cardiovascular diseases, obesity, type 2 diabetes, and certain cancers - as well as protect against low intakes or status of a range of micronutrients. This Rotterdam study adds to the growing evidence that as part of a balanced diet and healthier lifestyle, vegetables, fruits and fish can be a great weapon in the fight against AMD. Unfortunately, lack of awareness about their benefits and knowledge about what constitutes a portion, translates directly into a shortfall in the diet. So ophthalmologists and other eye care providers should try to incorporate good nutrition and easily understood lifestyle advice routinely into their counseling sessions, particularly in persons at risk of AMD.