

Glaucoma & Diet

UK BioBank Eyes & Vision Consortium Meeting

Wednesday 2nd September

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We need to know more!

- Patients are interested
- Empower patients
- Teach us about mechanisms
- New treatments

DATE 23 10 1993 DAY OF WEEK SATURDAY

BEFORE BREAKFAST

Food/Drink	Description and Preparation	Amount
Orange Squash	Robinsons whole Orange - Sweetened	1 glass

BREAKFAST

Food/Drink	Description and Preparation	Amount
Beef Patty with onion	Homebaked cold Salt added.	3a.
Tea.	Typhoo	1 Cup
Milk	S/Skimmed	1 Dessertspoon
Sugar	white	1/2 Teaspoon.

MID MORNING - between breakfast time and lunch time

Food/Drink	Description and Preparation	Amount
Coffee	Maxwell House Instant	1 Mug.
Sugar	1/2 Water / 1/2 S/Skimmed milk	1/2 Teaspoons
Cake.	white	
	Homemade Date Cake.	16a.

LUNCH

Food/Drink	Description and Preparation	Amount
Hammon Steak	Micro waved	6oz.
Chips	Deep Fried in Oil (Crisp + Dry)	7a.
Peas	Birds Eye (Frozen)	12a.
Bread	local bakery white unsliced	1/2 Slice 1/2 thick
Apple Pie	Homemade	3B
Sugar	white - sprinkled on	1 Teaspoon.
Custard	Birds - made with S/Skimmed milk	Small Fruit Dish.

TEA - between lunch time and the evening meal

Food/Drink	Description and Preparation	Amount
Tea.	Typhoo - tea bag.	1 Mug
Milk	S/Skimmed	1 Dessertspoon
Sugar	white	1/2 Teaspoons
Biscuit	Chocolate Digestive Fox's	1

WHAT I EAT

IS SO GOOD ALL

TO DO WITH YOU

18. Were any of the following foods which you ate last week produced organically (without pesticides)? Please tick the necessary box(es).

Vegetables, homegrown

Vegetables, purchased

Fruit, homegrown

Fruit, purchased

Milk and dairy products

Cereals, bread or cereal products

Meat

No organic foods eaten

This space has been left for you to tell us about anything else which you feel is important about your food/drink intake last week.

Having spoken about EPIC at a party on Saturday, where many people were also part of the survey, we all agreed that completing the survey changed what you eat. Whether this was to be healthier or create a good impression, I don't know. But your results may be skewed towards a healthier diet than is usual.

- you should question people on their next appt about changes in diet due to EPIC.

If you have any queries please telephone 0800-616911. This is a free phone number and will cost you nothing. You can leave a message any time of day or night as there is an answering machine. Someone will deal with your query and get back in touch with you as soon as they can.

Please return the diary to us in the prepaid envelope. Thank you very much for your cooperation in completing such a long and detailed form.

What we know

Anti-oxidants

- NHS / HPFS (N > 100,000)
 - FFQs
 - Self-reported (& validated) glaucoma diagnosis
 - No significant associations
- Osteoporotic women (N = 1,115)
 - FFQs
 - All participants examined (disc & field) – cross-sectional
 - Green collards, carrots, kale all protective
- Rotterdam Study (N = 3,502)
 - FFQ
 - Retinol equivalents & B1 protective for incident glaucoma

Essential fatty acids

- NHS / HPFS
 - No association with total fat intake or subtypes
 - Higher ratio of omega-3 to omega-6 associated with increased incidence of glaucoma
- SUN cohort Spanish university graduates
 - FFQs
 - Similar association

Caffeine

- Blue Mountains Eye Study
 - Higher IOP in POAG patients who drink more coffee
 - No association among OHT / no glaucoma
 - Chance finding?
- NHS / HPFS
 - Higher risk of incident POAG in participants drinking more coffee
 - BUT – only HTG with +FH
 - Chance finding?

Alcohol

- IOP
 - Acutely reduces IOP in dose-dependent manner
 - Greater usual intake associated with higher IOP
- Glaucoma
 - Inconsistent
 - positive, negative and null associations reported

UK Biobank

- Touchscreen
 - Food groups
- Multiple 24 hour recall (4/5, online/email)
 - Food groups
 - Estimated nutrients
- Alcohol intake is detailed
- Basic supplement intake data
- What outcome measures?
 - IOPg / IOPcc would be my 1st choice
 - Ultimately, as cohort ages, incident POAG

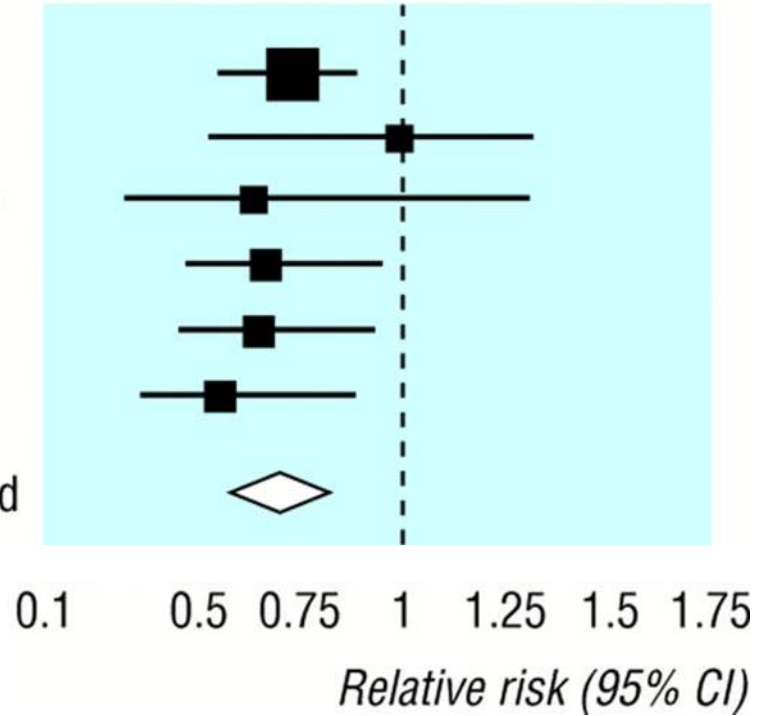
Caution!

The beta-carotene story

Cohorts

- Male health workers (United States)
- Male social insurance workers (Finland)
- Female social insurance workers (Finland)
- Male chemical workers (Switzerland)
- Hyperlipidaemic men (United States)
- Nursing home residents (United States)

Cohorts combined



Cohorts

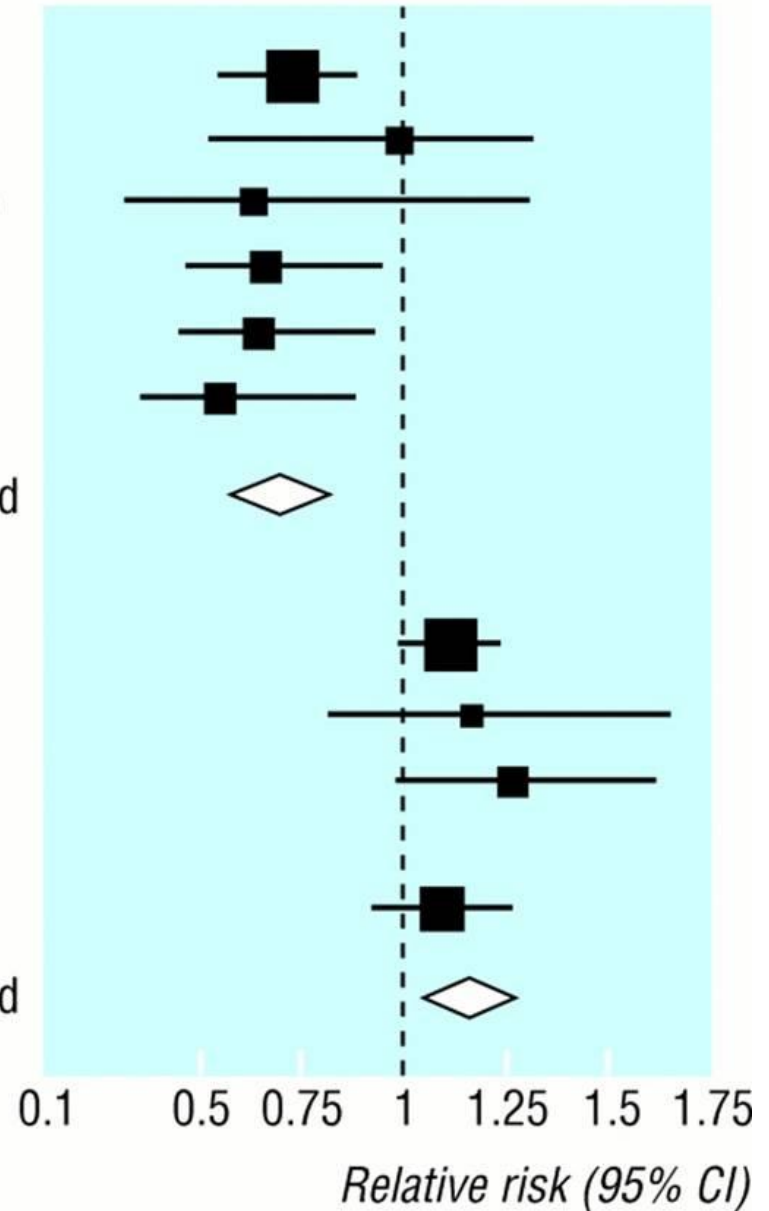
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Cohorts combined

Trials

- Male smokers (Finland)
- Patients with skin cancer (United States)
- Former smokers, asbestos workers (United States)
- Male physicians (United States)

Trials combined



Thank you