CurrantCraft®

European Black Currant Extract

CLINICAL TRIAL

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ABOUT FRANKLIN HEALTH RESEARCH

Clinical Research

Franklin Health Research (FHR) investigates botanical products, dietary ingredients, nutraceuticals, and dietary supplements for safety and efficacy.

As one of the nation's leading clinical research firms for natural product evaluation, our team conducts clinical research for some of the world's leaders in preventive and integrative health.

Independent

FHR operates as a contract research organization, conducting fully independent, third-party research for the natural products industry.

Quality

- Clinical Research Scientists
- Independent Ethics Approval
- Rigorous Methodology
- Transparent Research Process

CLINICAL TRIAL

A randomized, double blind, placebo controlled clinical trial was conducted in the United States (2021) among 61 adult female participants, aged 30-59 years old, working or studying full time in an online environment. Full time exposure was defined as having 6 or more hours on average per day in front of a screen.

Methodology

- This randomized, double blinded, placebo controlled, clinical trial was conducted in the US in 2021.
- It was authorized by an independent ethics review board (IRB) and registered on ClinicalTrials.gov: NCT04775654.
- Those in the intervention group consumed two capsules a day for ten weeks. Each capsule contained 227.5mg of CurrantCraft® 11% black currant extract, totaling 445mg per day. This treatment dosage of the extract provided 50mg of standardized anthocyanins. Those in the placebo group consumed identical yet inert capsules.

The purpose of this study was to examine the effects of CurrantCraft® supplementation on symptoms of digital eye fatigue.

Outcomes

The prespecified primary outcome of eye health was measured on day 70 using a modified version of the Hayes et al. (2007) Ocular Discomfort Questionnaire. This survey measures eye health, symptoms of digital eye fatigue, and quality of life. Outcomes are measured using a combination of likert scales and yes/no dichotomous questions. For the purposes of this study, three domains were included: blurred vision, dry eye, and eye strain.

Participants (N=61)

Demographics	Participants	Percentage
Race		
White	42	69%
Asian	7	11%
Black	5	8%
Hispanic	4	7%
Other	3	5%
Marital Status		
Married	39	64%
Single/Never Married	15	25%
Widowed, Divorced, Separated	7	11%
Employment Status		
Employed, full time	37	61%
Employed, part time	9	15%
Seeking Employment	2	3%
Part-time, Student, Retired	13	21%
Educational Attainment		
High School	6	10%
Some College	8	13%
2-Year Degree	5	8%
Bachelor's Degree	27	44%
Advanced Degree	15	25%
Income		
<$24,999k	5	8%
$25k-$34,999k	3	5%
$35k-$49,999k	11	18%
$50k-$74,999k	7	11.5%
$75k-$99,999k	19	31%
$100k-$124,999k	5	8%
$125k-$149,999k	7	11.5%
>$150k	4	7%

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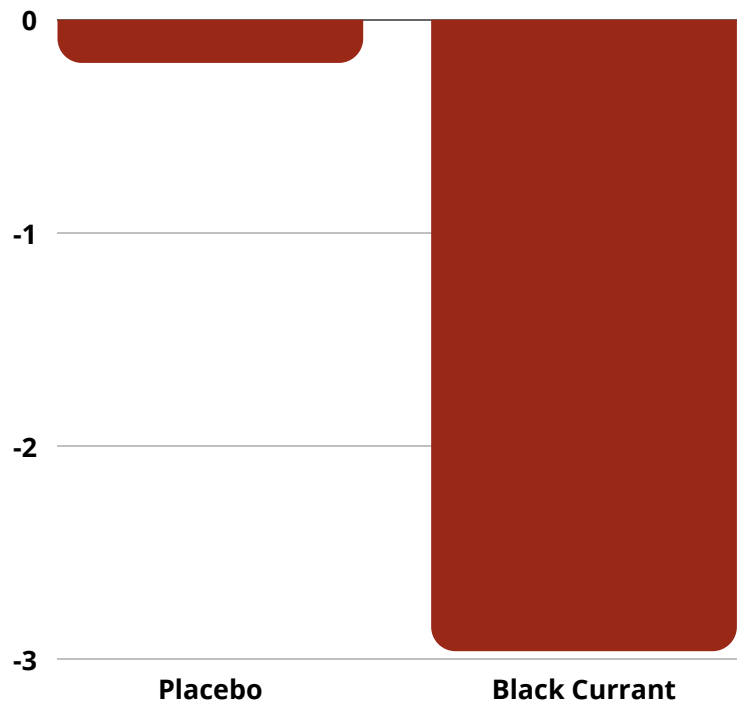
BLURRED VISION

BLURRED VISION BY THE NUMBERS

29.9%

Those in the Black Currant group saw a 29.9% reduction in symptoms of blurry vision during the 70 day trial period.



Over 70 days, the blurred vision scores of the intervention group decreased significantly when compared to the placebo group. The above graph shows that supplementation with CurrantCraft® produced drastic improvement.

BLURRED VISION

The blurred vision domain measures the extent to which eyes can sustain vision measured by four (4) distinct variables. Scores were collected for blurred vision at near distances, moderate distances, far distances, as well as difficulty refocusing the eyes.

At baseline, there was no difference between the CurrantCraft® group and the placebo group. By the end of the trial, the scores in the CurrantCraft® group had significantly dropped (p=.017).

Placebo Group

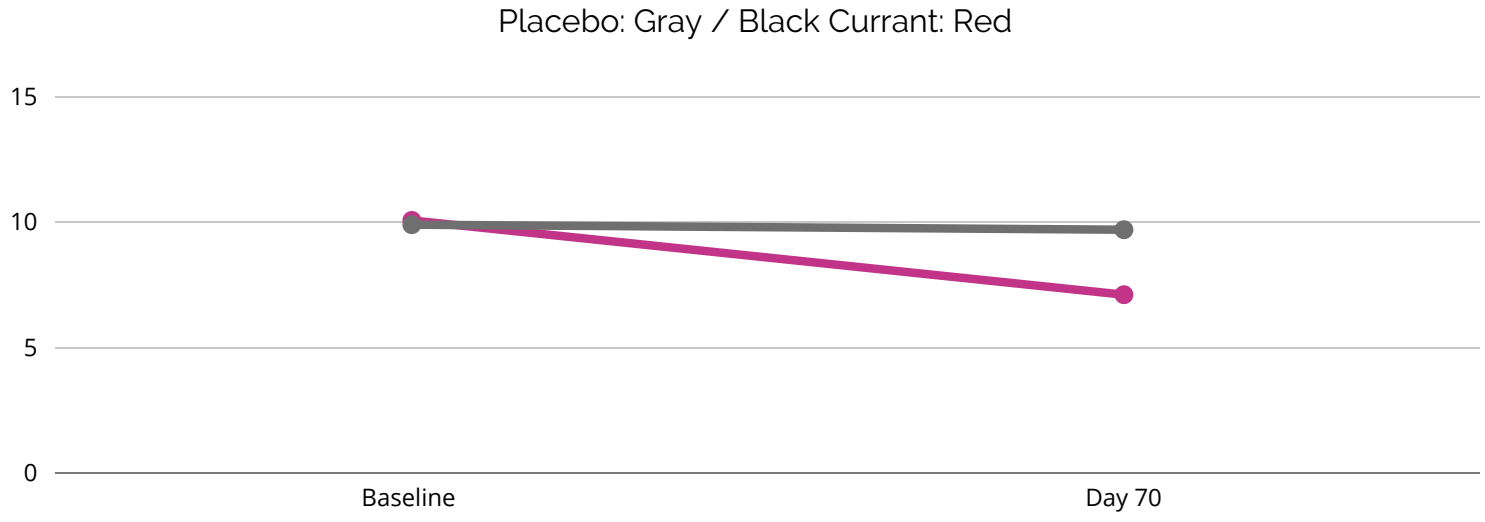
Baseline	9.90 (SD=5.26)
Day 70	9.70 (SE=1.26)

Adjusted Day 70 Mean: 9.93 (SE=0.81)

Black Currant Group

Baseline	10.07 (SD=5.34)
Day 70	7.11 (SE=0.63)

Adjusted Day 70 Mean: 6.86 (SE=0.86)



SUMMARY

Findings on Blurred Vision

The study evaluated the role of CurrantCraft®, a Black Currant (*Ribes nigrum)* extract, on blurred vision. The blurred vision domain included blurry vision at near distances, moderate distances, far distances, and difficulty refocusing the eyes. The participants who took CurrantCraft® as a dietary supplement experienced significant benefits. They had substantial reductions in blurred vision during a work or school day on all four variables in the domain. Daily supplementation of CurrantCraft® is an effective tool to promote eye health as related to blurred vision symptoms of digital eye fatigue.

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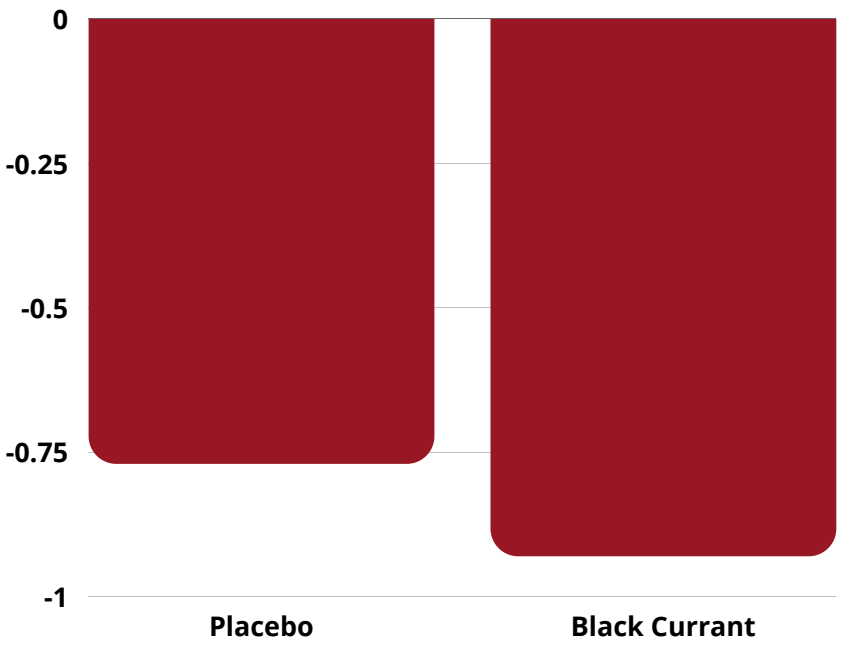
DRY EYE & EYE STRAIN

DRY EYES BY THE NUMBERS

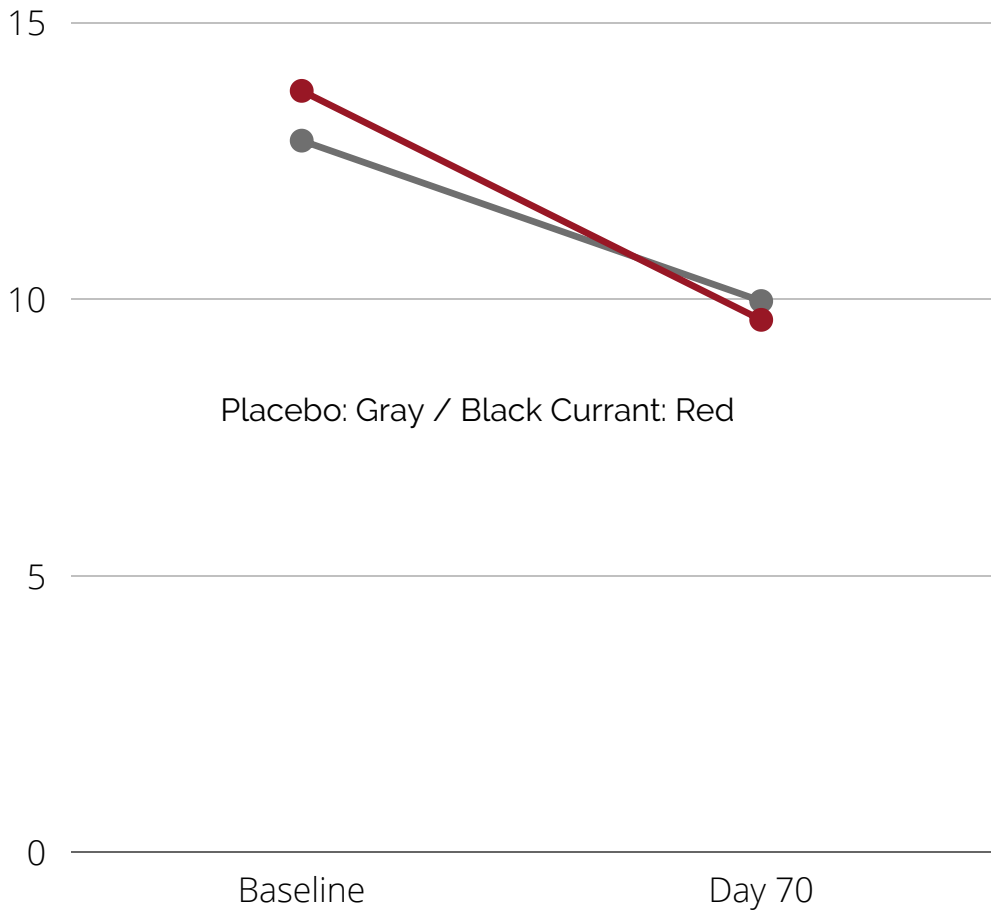
DRY EYES



Participants in the CurrantCraft® intervention group experienced a larger drop in dry eye scores after 70 days compared to the placebo group. Baseline scores for the CurrantCraft® group dropped by 16.4% from 5.67 (SD=3.11) to 4.74 (SD=2.30). This was much larger than the decrease from baseline scores in the placebo group, which fell by only 13%, from 5.87 (SD=3.39) to 5.10 (SD=3.79). These differences did not achieve statistical significance as the identified effect size is smaller than the study was powered to identify.

EYE STRAIN BY THE NUMBERS

EYE STRAIN



Participants in the CurrantCraft® group experienced a much larger drop in scores after 70 days compared to the placebo group. CurrantCraft® participant mean scores fell from baseline levels of 13.77 to post-intervention levels of 9.63, whereas placebo group mean scores only fell from 12.87 to 9.97. These differences did not reach statistical significance after controlling for other factors, likely due to the small effect size.

SUMMARY

Findings on Dry Eye & Eye Strain

This study measured the dry eye domain through variables including burning in the eyes and dryness in the eyes. It also measured the eye strain domain reflecting physical symptoms associated with digital eye fatigue such as headaches, sore eyes, strained eyes, and discomfort.

It should be noted that while not statistically significant, there was marked improvement in the domains of dry eye and eye strain in the intervention group. This study was powered to identify large effect sizes, allowing identification of the greatest effects of CurrantCraft®. This indicates that the blurred vision effects are the primary way by which CurrantCraft® protects from digital eye fatigue.

taking the next steps

LOOKING AHEAD

Black currant berries have shown substantial promise in their ability to support overall eye health. This study was conducted on individuals from a wide range of socioeconomic backgrounds, with varying levels of education and household income.

In human studies, black currant has shown to be successful in increasing ocular blood flow and returning endothelin-1 to normal levels, an oxidizing agent that increases inflammatory cytokines (Ohguro, 2012; Yoshida, 2013; Kowalczyk, 2015).

The 10-week length of the current study was able to demonstrate significant benefit in the blurred vision domain. Future studies should explore whether or not the benefits continue to grow in otherwise healthy women with prolonged use of a black currant supplement.

During the past two years, sheltering in place and social distancing drove much of the US population to work and attend school remotely. Online platforms made this possible. But as a result, the amount of time spent fixated on screens has increased significantly.

With a global increase in total screentime among members of the workforce as well as full time students, this study demonstrates relevance to the need to address digital eye fatigue in those who identify as women working on screens 6+ hours a day. Using CurrantCraft® black currant extract as a dietary supplement has been shown to provide benefit by decreasing double and blurred vision during prolonged screen usage.

FOR MORE INFORMATION ABOUT

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