Introduction to DFEND 3 and Behavior Change and Determinants of Behavior

Jamie Baum  
*University of Arkansas, Fayetteville, baum@uark.edu*

Erin Howie  
*University of Arkansas, Fayetteville, ekhowie@uark.edu*

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Introduction to the DFEND 3 Study and Q&A

DFEND 3: Healthier habits, healthier you: Implementing behavior change for health and well-being
We will update uaex email address to uada for our newsletters, so no need to re-register.
DFEND 3 Contacts

Primary Investigators
Dr. Jamie Baum – baum@uark.edu, (479)575-4474
Dr. Erin Howie Hickey – ekhowie@uark.edu

Project Manager
Emma Hendy – ehendy@uark.edu
DFEND

• Diet, food, exercise and nutrition during social distancing

• This is the 3rd installment of the DFEND series.

• The focus is on nutrition, physical activity, health and behavior change.

Website
https://aaes.uark.edu/dfend3
Purpose

• The purpose of the study is to learn more about the effect of behavioral, nutrition, and physical activity education and goal setting on personal health goals using online lectures, virtual coaches, and social media.
What is new in DFEND 3?

• **Free** weekly sessions with experts starting Monday, February 15th:
  • Mondays: exercise and physical activity
  • Tuesdays: nutrition with a registered dietitian
  • Thursdays: behavior and psychology

• **Weekly challenges**
  • If you’re in the study, join our private Facebook group or participate via email (dfend.uofa@gmail.com)
  • Or, participate through our website - [https://aaes.uark.edu/dfend3](https://aaes.uark.edu/dfend3)
2 Options for Participation in DFEND 3

1. Join and participate in the DFEND3 research study, or
   Deadline to sign up is Friday, February 19th.

2. Participate in DFEND 3 without joining the research study.

It isn’t too late to sign to participate in the DFEND 3 research study! The DFEND 3 research study is open to all who want to participate.

The consent form and pre-assessment survey can be found on our website at https://aaes.uark.edu/dfend3 to join.
How do you qualify?

• Over the age of 18 years

• Live in Arkansas

• Have access to the internet and Facebook

• Please encourage colleagues, friends, family to sign up!
What will you be asked to do?

• Attend weekly DFEND sessions either live or view the recordings on the YouTube channel.

• Attend personalized weekly Q&A sessions related to nutrition/diet, physical activity, and/or behavior change.

• Complete weekly behavior, nutrition, and physical activity challenges.

• Complete the DFEND survey at the beginning, middle, and end of the DFEND program.
How long will the study last?

• The study will last 20 weeks.
• Each week, 1-2 hours will be spent on the study.
• Each class session is 30 minutes long
• Weekly challenges may take 30 to 90 minutes
• Some weeks, there may be an additional 10-15 minutes for reading email and social media communication.
Study Time Commitment

• Friday educational sessions – February 12th through June 25th, 2021
  • 30 minutes
  • 12:00 – 12:30 pm

• Participate in weekly health and behavior challenges

• Meet with a personalized coach – attend Zoom sessions for personalized Q&A
  • Mondays from 12-1 pm: Behavior change expert
  • Tuesdays from 12-1 pm: Nutrition expert/Registered dietitian
  • Thursdays from 12-1 pm: Exercise coach/trainer

• Take the 3 assessments
  • Before starting the study
  • In the middle
  • At the end
What are the possible benefits?

• You will benefit from having the opportunity to meet weekly with a registered dietitian and/or nutrition specialist, a behavior expert, and a physical activity expert to personalize your experience in the study.

• You will also receive compensation of a Walmart gift card for $75 if you:
  • Complete all three DFEND surveys (pre assessment, middle, and post assessment)
  • Complete 16 out of 18 weekly challenges
Meet the Team - https://aaes.uark.edu/dfend3

- **Primary Investigators**
  - Jamie Baum
  - Erin Howie

- **Project Manager**
  - Emma Hendy

- **Personalized Coaches**
  - Bryce Daniels (exercise and physical activity)
  - Jamie McDermott, MS, RDN (nutrition)
  - Danielle Higuera (behavior and psychology)

- **Content Contributors**
  - Keely Lagrone (exercise and physical activity)
  - Emma Hendy (nutrition and diet)
  - Zach Roberts (exercise and physical activity)
  - Lily Smith (food and cooking skills)
Questions?
baum@uark.edu
Behavior Change & Behavioral Determinants

Erin K Howie Hickey
Why Behavior Change?

“**Learning** has occurred when a **change in behavior** can be observed”

– some professor I once had

“Learning is the relatively permanent change in a person’s knowledge or behavior due to experience. This definition has three components: 1) the duration of the change is long-term rather than short-term; 2) the locus of the change is the content and structure of knowledge in memory or the behavior of the learner; 3) the cause of the change is the learner’s experience in the environment rather than fatigue, motivation, drugs, physical condition or physiologic intervention.”

–From Learning in Encyclopedia of Educational Research, Richard E. Mayer
New Years Resolutions

- Monthly trends in the number of Google searches in the USA for recipes related to the above diets were obtained from Google Trends.

Science of Behavior Change

Why do we do what we do?

How can we change what we do?

THEORY
Social Cognitive Theory

• 94,039 citations in Google Scholar
• Self-efficacy
  • Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments

Transtheoretical model

• 7,768 citations in Google Scholar
• Stages of Change

Transtheoretical Model of Change
Prochaska & DiClemente
Theory of Planned Behavior

- 47,359 citations in Google Scholar
- Attitudes & Intentions

Self-Determination Theory

• 42,558 citations in Google Scholar
• Basic needs
  • Autonomy
  • Relatedness
  • Competence
• Motivation

Self-Determination Theory

- **Competence**: need to be effective in dealing with environment
- **Autonomy**: need to control the course of their lives
- **Humans' three basic needs**: need to have a close, affectionate relationships with others
- **Relatedness**: need to have a close, affectionate relationships with others
The Self-Determination Continuum

Motivation
- Amotivation
- Extrinsic Motivation
- Intrinsic Motivation

Regulatory Styles
- Non-Regulation
- External Regulation
- Introjected Regulation
- Identified Regulation
- Integrated Regulation
- Intrinsic Regulation

What is the source of the motivation?
- Impersonal
- External
- Somewhat External
- Somewhat Internal
- Internal
- Internal

What regulates the motivation?
- Nonintentional, Nonvaluing, Incompetence, Lack of Control
- Compliance, External Rewards and Punishments
- Self-control, Ego-Involvement, Internal Rewards and Punishments
- Personal Importance, Conscious Valuing
- Congruence, Awareness, Synthesis With Self
- Interest, Enjoyment, Inherent Satisfaction

Physical Activity Behavior Examples

Razorwalk

SHAPEs
Study of Health and Activity in Preschool Environments

CAFAP
University of Arkansas, Food and Activity Program

U of A
Division of Agriculture Research & Extension
University of Arkansas System

DFEND

Center for Human Nutrition

Exercise is Medicine
On Campus
University of Arkansas
You are not alone!

Determinants of Health Behavior

• Individual Factors
  • Genetics, Motivation, Attitudes, Knowledge, Skills

• Interpersonal Factors
  • Social support from family and friends

• Organizational Factors
  • Schools, work, church

• Community Factors (& environment)
  • Farmers markets, parks, access to healthy food

• Policy Factors
  • Zoning regulations, health insurance
Strategies for Change

DFEND 3.0

- Motivation & reward
- Goal setting
- Tracking & Feedback
- Role Modelling
- Mindfulness
- Social Support
- Self-efficacy

- Social influences
- Environments
- Availability & Accessibility
- Policies
- Communication