Women exercise and health

A mobile application (AI-Powered Platform) for Women's Exercise and Health

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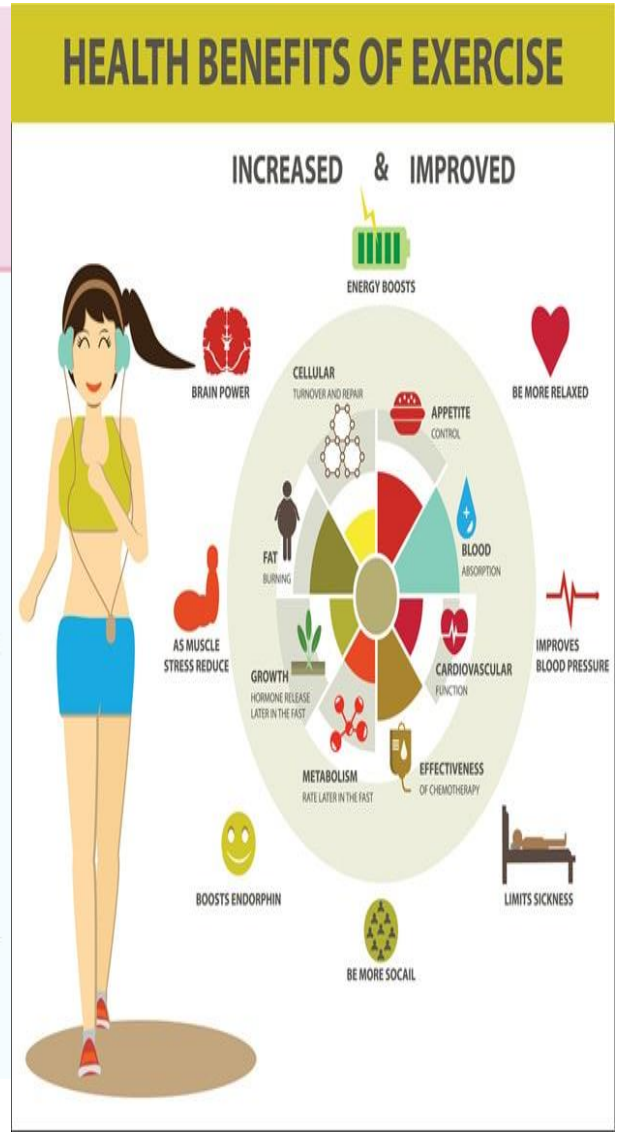
Health risks associated with inactivity

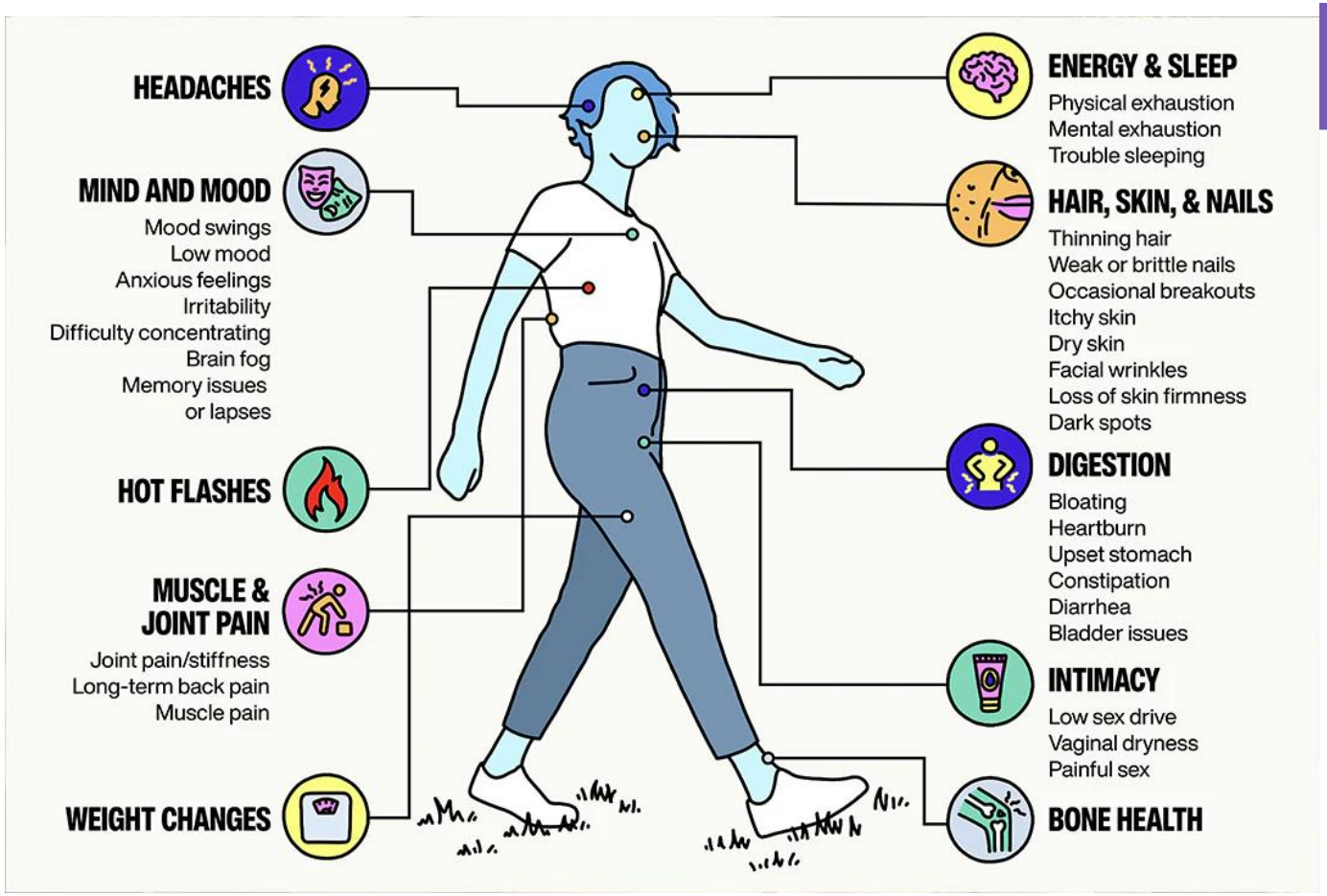
- **Cardiovascular Disease**: heart disease and hypertension in women, particularly post-menopause when estrogen levels drop.
- **Obesity**: weight gain and obesity, which is associated with various health issues, including diabetes and joint problems.
- **Osteoporosis**: Women are at a higher risk for osteoporosis, especially after menopause. Inactivity can accelerate bone density loss and increase the risk of fractures.
- **Mental Health Issues**: Women are more prone to anxiety and depression, and physical inactivity can exacerbate these conditions.
- **Hormonal Imbalances**: Inactivity can affect hormone levels, potentially leading to issues such as irregular menstrual cycles, fertility problems, and increased stress levels.
- **Increased Risk of Certain Cancers**: a higher risk of breast and endometrial cancers in women.
- **Diabetes**: risk factor for type 2 diabetes, which is increasingly prevalent among women, particularly as they age.
- **Muscle Weakness and Falls**: decreased muscle strength and balance, increasing the risk of falls and injuries, particularly in older women.
- **Metabolic Syndrome**: a cluster of conditions that increases the risk of heart disease, stroke, and diabetes.

Special benefits of exercise for women: menstrual function

Special benefits of exercise for women: before, during and after pregnancy

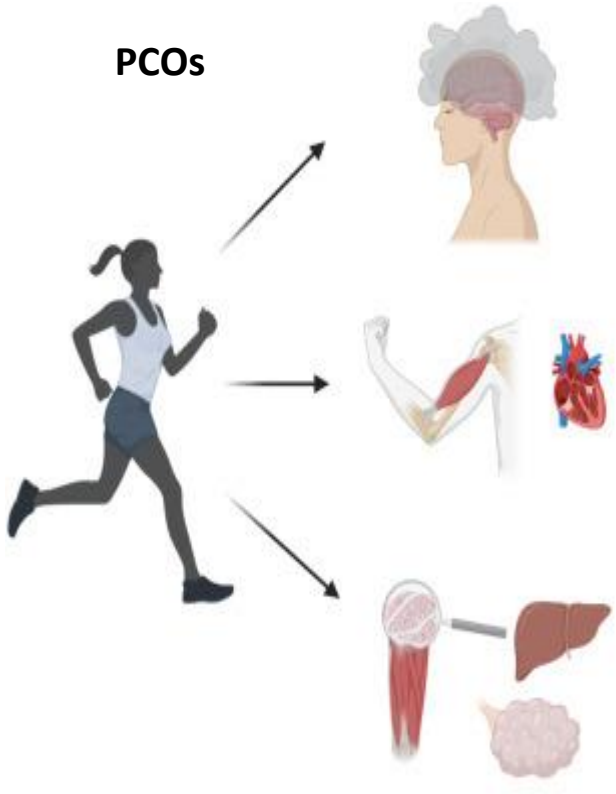


Special benefits of exercise for women: menopause



Special benefits of exercise for women: special disease(PCOs, breast cancer, osteoprosis…)

PCOs

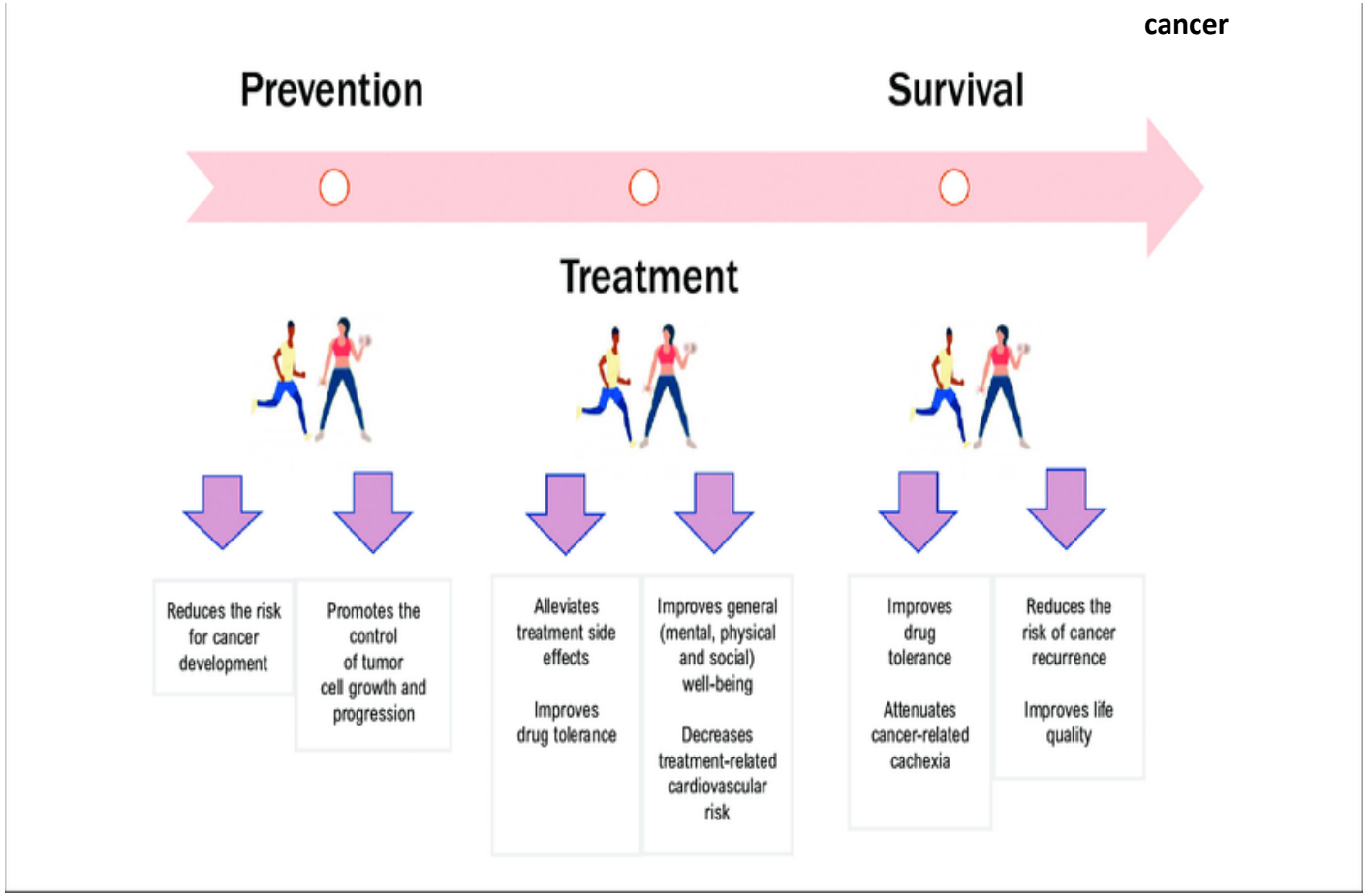


Mental health and wellbeing
- ↓ Symptoms of depression
- ↓ Symptoms of anxiety
- ↓ Body image distress
- ↑ Quality of life

Anthropometry and performance
- ↑ Cardiorespiratory fitness
- ↑ Muscular strength and endurance
- ↑ Weight management
- ↓ Waist circumference
- ↑ Lean muscle mass maintenance

Metabolic and reproductive
- ↓ Hyperinsulinaemia
- ↑ Glucose control
- ↑ Mitochondrial function
- ↑ Ovulatory function
- ↑ Menstrual regularity

Breast cancer



Problem Statement

- Challenges faced by women in accessing personalized health and exercise plans
- Lack of tailored fitness resources and communities for women
- Lack of time for exercise participation in gyms

Solution: Home-based exercise designed and conducted for specific situations through AI-powered mobile application

Target Audience: women at different ages and health conditions

Reproductive age:

- Need special exercise for menstrual pain
- Special exercise for preventing chronic disease(osteoporosis, breast cancer, obesity, PCOs)

Pregnancy:

*Special exercises for preparing pregnancy(before pregnancy), during pregnancy and recovering from pregnancy

Menopause:

Specific exercises for menopausal symptoms(physical and psychological)

common health issues:

Specific exercises for patients with Breast cancer, PCOs, osteoporosis

Key Features of the App

- **Personalized workout plans**
- **Nutrition tracking and meal planning**
- **Health tracking (menstrual cycle, pregnancy, etc.)**
- **Community engagement (forums, challenges)Joining user with trainer**(through contact information and introducing related health center and trainers) in the case of necessity or interest

AI Integration

- Users input data regarding their menstrual cycle, pregnancy status, or menopausal stage to receive tailored workout plans.
- The AI analyzes historical data and preferences to adjust recommendations dynamically.
- Machine learning for adaptive workout and diet plans

Cycle-Sensitive Workouts(examples)

Based on fitness and health status(considering special conditions) exercise program will be **personalized** and contain guidance(videos and pictures):

- **Menstruation**: Tailored low-impact workouts such as yoga, gentle stretches, or walking during heavy flow days; more intense workouts during the ovulation phase.
- **Pregnancy**: Workouts focusing on core stability, flexibility, and gentle cardio; specialized exercises for each trimester.
- **Menopause**: Emphasis on strength training and bone health, with workouts designed to alleviate symptoms like hot flashes and mood swings.

Health Tracking and Insights

- Menstrual Cycle Tracker:

Users can log their cycle, symptoms, and moods, receiving insights on how their cycle may impact exercise and wellness.

- Pregnancy Tracker:

Customized tracking for weight, trimester milestones, and activity levels, with safety notifications for exercise modifications.

- Menopause Tracker:

Log symptoms such as hot flashes, sleep disturbances, and mood changes, providing insights and correlated workout recommendations.

Educational and contact Resources

- Articles, videos, and guides on managing health through different life stages, including advice will be provided from healthcare professionals.

Community and Motivation

- Connect with friends and family for group challenges
- Community forums for sharing experiences and motivation

Connected services

- Virtual Coaching
- AI Chatbot:

A virtual assistant to answer questions, provide quick tips, and motivate users to stay active based on their current circumstances.

- Live Classes and Sessions:

Options for exercise classes led by certified trainers experienced in women's health, tailored to different needs(contact and address will be provided).

- Integration with Wearable Devices

Syncing with fitness trackers and smartwatches to monitor activity levels, heart rate, and sleep quality.

- A personalized dashboard displaying upcoming workouts, tracked health metrics
- Notifications: Gentle reminders for workout sessions, hydration, and wellness tips specific to the user's needs

Safety and Well-Being

- Safety Tips: Importance of consulting healthcare professionals or screening health through app questions before starting any exercise program
- Emergency Features: Quick access to emergency contacts or health information
- Introducing and establishing aging exercise and health center for specialized supervised exercises
- Training and introducing specialized home exercise trainers

Thank you

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