NICE TO MEET YOU

PRESENTERS

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THE MOVEMENT: BETTER BUILDINGS
WE SPEND 90% OF OUR TIME INDOORS.
THE BUILDINGS WHERE WE LIVE, WORK, LEARN AND RELAX PROFOUNDLY IMPACT OUR HEALTH, WELL-BEING AND PRODUCTIVITY.
WHAT DETERMINES THE STATE OF HEALTH?

THE ULTIMATE GOAL OF OUR BUILDINGS & COMMUNITIES: TO CREATE A POSITIVE HUMAN EXPERIENCE
"HEALTH IS A STATE OF COMPLETE PHYSICAL, MENTAL, AND SOCIAL WELL-BEING, AND NOT MERELY THE ABSENCE OF DISEASE OR INFIRMITY.

THE WORLD HEALTH ORGANIZATION
INVEST IN PEOPLE FOR RETURN ON INVESTMENT

BETTER BUILDINGS ARE WELL.

OUR STANDARD
The premier global standard for healthy buildings

YOUR COMMUNITY
Join the movement with the WELL AP credential
THE GLOBAL WELL MOVEMENT

550+ WELL PROJECTS

120+ million SQUARE FEET

1500+ WELL APS
IWBI is a public benefit corporation whose mission is to improve human health and well-being in buildings and communities everywhere.
DEVELOPMENT OF WELL

IWBI undertook a comprehensive expert peer review process, which included three phases—a scientific, medical and building expert review—and culminated in the release of the WELL Building Standard.
WELL IS MORE THAN GOOD DESIGN.
A COMPREHENSIVE APPROACH TO WELL-BEING

The WELL Building standard is made up of features that address seven concepts:

AIR  WATER  NOURISHMENT  LIGHT  FITNESS  COMFORT  MIND
Concentrations of some pollution indicators can be 2-5 times higher indoors compared to outdoors.¹

Polluted air is the number one environmental cause of premature mortality, contributing to 200,000 premature deaths annually in the United States alone and approximately seven million, or one in eight, premature deaths globally.²

SOURCES OF POOR INDOOR AIR QUALITY

THE BENEFITS OF BETTER AIR QUALITY

A World Green Building Council study found that office workers performed better on cognitive function tests in buildings with lower VOC and CO2 levels.

Breathe easy with optimal indoor air quality

- Material selection
- Ventilation
- Filtration
- Moisture control
- Maintenance and operations
- Source of concern protection
- Construction purposes
Being dehydrated by just 2% has been shown to impair cognitive performance.\textsuperscript{1}

The Institute of Medicine recommends that women consume at least 2.7 L [11 cups] and men consume at least 3.7 L [16 cups] of water from foods and beverages each day.\textsuperscript{2}


WATER IN HUMAN TISSUE

MORE THAN 2/3 OF THE HUMAN BODY IS COMPRISED OF WATER.

WHERE DO WATER CONTAMINANTS COME FROM?

Deteriorating water quality threatens global gains made in improving drinking water.

CONSEQUENCES OF DEHYDRATION

EVEN MILD DEHYDRATION (1.36% DEHYDRATION) IS ASSOCIATED WITH DECREASED MOOD, INCREASED PERCEPTION OF TASK DIFFICULTY, AND LOWER CONCENTRATION.

Drink up: WELL promotes high quality water and improved accessibility

- Performance testing
- Treatment
- Maintenance and operations
- Hydration promotion
Over half of the world’s adult population is overweight or obese.¹

Poor nutrition is a major contributor to preventable chronic diseases such as cardiovascular disease, diabetes, and obesity.²

OBESITY EPIDEMIC


GLOBAL OBESITY RATES 1972-2012

PREVALENCE OF OBESITY IN US ADULTS

- 2/3 OF ALL AMERICAN ADULTS ARE OVERWEIGHT.
- 1/3 OF ALL AMERICAN ADULTS ARE OBSESE.
FIGURE 1:
AGE-STANDARDIZED PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 YEARS OF AGE, COMPARABLE ESTIMATES, 2014

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not be full agreement. All rights reserved. Copyright – WHO 2015.

Source: Tracking Tool (http://www.who.int/nutrition/trackingtool)
NOURISHMENT

Dig in to wholesome foods. WELL Certified™ buildings limit the presence of unhealthy ingredients and can encourage better eating habits.

- Healthy portions
- Mindful eating
- Food production
- Access to healthy foods

- Food preparation
- Allergies and alternatives
- Transparency
- Environmental Cues and influencers
LIGHT: THE ISSUE

Disruption to the body’s circadian rhythm are associated with chronic diseases including obesity, diabetes, and depression.¹

LIGHT AT NIGHT: A POSSIBLE CARCINOGEN

DAILY CYCLE OF CORTISOL & MELATONIN

HUMAN CIRCADIAN RHYTHMS


10:00 High alertness
9:00 Highest testosterone secretion
7:30 Melatonin secretion stops
4:30 Lowest body temperature
2:00 Deepest sleep
15:30 Fastest reaction time
18:00 Highest blood pressure
21:00 Melatonin secretion starts
LIGHT

Benefit from daylight & lighting systems designed to increase alertness, enhance experience and promote sleep.

- Circadian design
- Daylighting
- Glare control
- Color quality
- Activity-based lighting levels
- Visual acuity
Physical inactivity is highly prevalent worldwide, with 23% of adults failing to meet international exercise and physical activity guidelines established by the WHO.¹

Additionally, the WHO notes that individuals who are insufficiently active have a 20-30% higher risk of mortality compared to those who meet international recommendations.²

LEADING CAUSES OF DEATH WORLDWIDE

THE 10 LEADING CAUSES OF DEATH IN THE WORLD
2012

1. ISCHAMMIC HEART DISEASE 7.4 MILLION
2. STROKE 6.7 MILLION
3. COPD 3.1 MILLION
4. LOWER RESPIRATORY INFECTIONS 3.1 MILLION
5. TRACHEA, BRONCHUS, LUNG CANCERS 1.6 MILLION
6. HIV/AIDS 1.5 MILLION
7. DIARRHEAL DISEASES 1.5 MILLION
8. DIABETES MELLITUS 1.5 MILLION
9. ROAD INJURY 1.3 MILLION
10. HYPERTENSIVE HEART DISEASE 1.1 MILLION

TOP 10 CAUSES OF DEATH
1900 VS 2010

1. PNEUMONIA/INFLUENZA 202.2
2. CANCER 185.9
3. TUBERCULOSIS 194.4
4. GASTROINTESTINAL INFECTIONS 142.7
5. ACCIDENTS 137.4
6. HEART DISEASE 106.9
7. NEPHROPATHIES 88.6
8. CANCER 64.0
9. ACCIDENTS 72.3
10. SENILITY 50.2

1. SUICIDE 12.2
2. PNEUMONIA/INFLUENZA 16.2
3. NEPHROPATHIES 16.3
4. DIABETES 22.3
5. ALZHEIMER’S DISEASE 27.0
6. ACCIDENTS 39.2
7. CEREBROVASCULAR DISEASE 41.8
8. NONINFECTIONOUS AIRWAYS DISEASES 44.6

PHYSICAL ACTIVITY AND HEART HEALTH

CARDIOVASCULAR DISEASE (CVD) IS THE LEADING CAUSE OF DEATH WORLDWIDE.¹

THE RISK OF DEVELOPING CVD CAN BE REDUCED WITH REGULAR, MODERATE-INTENSITY AEROBIC PHYSICAL ACTIVITY (AT LEAST 150 MINUTES PER WEEK).²

HEALTH EFFECTS OF SITTING

PEOPLE WITH SEDENTARY JOBS HAVE TWICE THE RISK OF CARDIOVASCULAR DISEASE AS PEOPLE WITH STANDING JOBS.¹

FITNESS

Keep moving with WELL’s integration of exercise and fitness into everyday life.

- Exterior active design
- Interior active design
- Activity-based working
- Physical activity spaces
- Awareness and habits
- Physical activity programs
Work-related musculoskeletal disorders result in over $2.5 billion in medical and other associated costs, including lost productivity.\(^1\)

Distracting noise can contribute up to a 66% decline in performance.\(^2\)

Unwanted or excessive noise can lead to difficulties with communication and concentration.\(^3\)

An office that is too hot or too cold can cause a drop in productivity of up to 9%.\(^4\)

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THE ENDOCRINE SYSTEM

• COMPRIS A COLLECTION OF MAJOR GLANDS THAT SECRETE CHEMICAL MESSENGER HORMONES THROUGHOUT THE BODY.

• ENDOCRINE HORMONES REGULATE GROWTH, DEVELOPMENT, REPRODUCTION AND METABOLISM.

• RECEIVES SENSORY INPUTS FROM THE SMELL, TASTE, VISUAL, TOUCH, TEMPERATURE, PAIN, ETC.

• EFFECTS ARE SLOWER TO INITIATE AND PROLONGED IN RESPONSE, LASTING FROM MINUTES TO WEEKS.

WORK-RELATED MUSCULOSKELETAL DISORDERS

- Neck Strain
- Shoulder Tendinitis & Bursitis
- Lower Back Pain
- Carpal Tunnel Syndrome
- Hand & Wrist Tendinitis
- Tennis & Golfer’s Elbow (Epicondylitis)
CONSEQUENCES OF ENVIRONMENTAL NOISE
DEFINING THERMAL COMFORT

ENVIRONMENTAL FACTORS

Air temperature
Humidity
Air speed
Radiant temperature

PERSONAL FACTORS

Clothing levels
Metabolic rates

COMFORT

Settle into a distraction-free, productive and comfortable space.

- Ergonomic
- Acoustics
- Thermal
- Olfactory
- Accessibility
Various environmental characteristics can have direct impacts on mental health and well-being, such as housing, crowding, noise, indoor air quality, and light.\(^1\)

Mental, neurological, and substance use disorders account for 14% of the global burden of disease and depression alone is the leading cause of disability worldwide.\(^2\)

Poor mental health is linked to poor health outcomes such as cardiovascular disease, obesity, and diabetes and to poor health behaviors such as smoking, disordered sleep patterns, and physical inactivity.\(^3\)

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• Stress is a response to demands placed on the body by internal and external conditions or circumstances.¹

• Persistent stressful states can have extreme health consequences including increased risk of depression, cardiovascular disease, diabetes, and upper respiratory infection among other adverse health outcomes.²
MIND & MENTAL HEALTH

A COMBINATION OF COMPLEX SYSTEMS IMPACT MENTAL WELL-BEING:

• THE NERVOUS SYSTEM
• THE ENDOCRINE SYSTEM
• ENVIRONMENTAL CONDITIONS
• SOCIO-CULTURAL CONDITIONS
• PERSONAL CHARACTERISTICS
Employees who work in office spaces that incorporate natural elements such as natural light and greenery report:

15% higher levels of well-being and creativity

MIND

Stay centered: WELL optimizes cognitive and emotional health through design, technology and treatment strategies.

- Stakeholder engagement
- Transparency
- Wellness awareness and protocols
- Connection to nature
- Adaptable spaces
- Altruism
HOW DO I ACHIEVE WELL?
BEGIN YOUR JOURNEY TO WELL CERTIFICATION

REGISTER  ASSESS  SUBMIT  VERIFY  CERTIFY
VERIFIED PERFORMANCE

The WELL differentiator: data-driven environmental assessments through on-site performance verification.
PEOPLE + PLANET

WELL works in conjunction with global green building rating systems to optimize building performance for human health and our environment.
Green Business Certification Inc. (GBCI), the same organization that administers LEED certification, provides third-party certification for WELL.
SILVER, GOLD OR PLATINUM

100% OF PRECONDITIONS

100% OF PRECONDITIONS

40%+ OF OPTIMIZATIONS

100% OF PRECONDITIONS

80%+ OF OPTIMIZATIONS
ALL BUILDINGS IN

Choose from our project types and pilot programs – or work with us for a custom approach to your unique building project.