

# Good health is priceless, even though it has a cost

## A healthy workforce boosts business performance

In 2017, the direct cost of sick leave in Luxembourg was €619 million, representing 2.4% of the total salaries paid (source: workplace absenteeism monitor)

While prevention was believed to be an added convenience a few years ago, it is now a recognised factor for the well-being of employees and the competitiveness of businesses.

The goal of B-NEXT CARE is to offer preventive medicine assessments that supplement the follow-up organised by the occupational medical authorities.

## Prevention has many facets



#### PRIMARY

Staying healthy and avoiding disease



#### **SECONDARY**

Detecting or treating disease before symptoms appear



#### **TERTIARY**

Mitigating disease-related damage



The check-up offered includes a series of tests to cover the following:

- ✓ nutrition and inflammation
- √ cardiovascular risk
- √ liver function assessment
- √ diabetes screening
- √ kidney function
- $\checkmark$  iron assessment
- ✓ bone metabolism✓ thyroid assessment
- √ cell ageing



A questionnaire is to be completed in the application by the individual to provide information in three sections:









All these measures aim to **promote** lasting healthy individual lifestyle choices and share them in **professional and community environments**.

#### Benefits for employees

- √ Personalised health assessment
- ✓ Anticipating potential health problems
- ✓ Identifying risk factors
- ✓ Protecting health
- ✓ Personal recognition

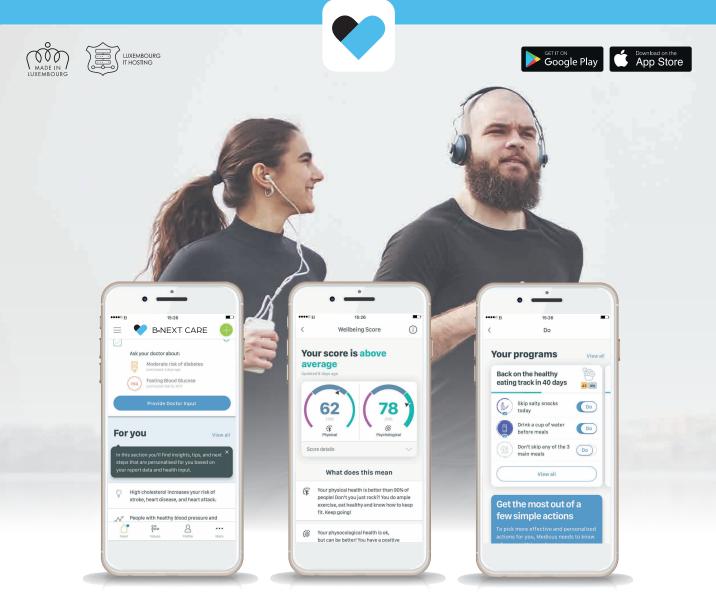


## Benefits for employers

- ✓ Commitment to the well-being of employees
- ✓ Protection and enhancement of human assets
- ✓ Positive impact on performance
- √ Socially responsible business operation

# Your personnel preventive medicine health feed

#### YOUR FUTURE HEALTH IS IN YOUR HANDS



The B-NEXT CARE app uses a reasoning engine that leverages artificial intelligence to incorporate the most recent medical knowledge while interpreting your tests results and considering the changes in your biometric values on daily basis.

Using the biomarkers and the information completed in the application (including via connected healthcare devices) the reasoning engine is able to:

- √ Monitor and interpret your vital signs
- ✓ Calculate risk factor scores: cardiovascular disease, high blood pressure, diabetes
- Provide personalised recommendations

- ✓ Offer personalised awareness and coaching
- Report an individual and corporate well-being score, tracked in relation with recommendations

Ever closer to you with our app



## Preventive medicine assessments

# Composition of assessments

The preventive medicine assessments offered by BIONEXT associated with the B-NEXT CARE mobile app can bring out some imbalances before any symptoms appear. The main areas are: screening and prevention of the chronic diseases that are most frequently found in the target population (diabetes, kidney disease, cardiovascular disease) and searching for deficiencies or overloads relating to ageing or general well-being.





#### Diabetes prevention

When combined with fasting blood sugar tests, the calculation of specific predictive scores can, if necessary, allow the application of preventive measures adapted to each patient in order to prevent the development of one of the most frequent chronic conditions.



#### Kidney

Chronic kidney disease is very widely under-diagnosed, even though simple hygiene and diet measures can help prevent its recurrence or keep it under control. The different biomarkers are available for screening purposes.



#### Nutrition and inflammation and iron balance assessment

A complete nutritional assessment can help in the early detection of deficiency or malnutrition, with significant consequences on overall health.



## Thyroid function assessment

Thyroid malfunction (hyperthyroidism or hypothyroidism) is frequent in the wider population. Its symptoms are not very specific. That is why the working of this gland, which is essential for the proper working of the body, must be assessed as part of a preventive approach.





#### Cardiovascular assessment

Cardiovascular disease is one of the main reasons for a medical consultation and the leading cause of death in the Grand Duchy of Luxembourg. By combining biological tests with clinical data (BMI, blood pressure, heart rate, personal and family history), lifestyle recommendations can be made, with the calculation of a score for the risk of occurrence of cardiovascular conditions.



#### Bone metabolism assessment

The determination of the bone status makes it possible to assess the balance between bone formation and degradation. The aim is to detect situations where steps to prevent osteoporosis (a frequent and silent disease) are required, and also to remind patients of simple and effective action for all ages.



### Colorectal cancer screening

Colorectal cancer is the second most deadly form of cancer, after lung cancer. 95% of cases occur after 50 years, which is why we offer this test. Colorectal cancer develops slowly, as a polyp can take up to ten years to become cancerous.

. Screening offers the benefit of detecting cancer or a pre-cancerous lesion early enough to increase the chances of successful treatment. If detected early enough, 9 out of 10 cases of colorectal cancer can be cured.



#### Oxidative stress and cellular ageing assessment

Oxidative stress is when the cells are attacked by free radicals. It reflects an imbalance between these free radicals and anti-oxidant molecules. The aim is to determine how well the body defends itself from oxidative stress in order to limit its impact (cell ageing, chronic disease etc.)



#### Urological assessment

In men, PSA testing can help the early detection of prostate conditions. In the event of an anomaly, the patient is advised to see a specialist via personalised advice on the B-NEXT CARE application.

Name of score	Type of score	Description	Data required
FINDRISC	Diabetes score	The FINDRISC score estimates the risk of developing type 2 diabetes in the next 10 years. The use of the score is recommended by the Higher Health Authority.	Age Height Weight Waist circumference Reply to 9 questions
SCORE2	Cardiovascular score	The SCORE2 score estimates the risk of occurrence of a cardiovascular condition in 10 years.  The use of the score is recommended by the European Society of Cardiology.	Age Sex Total cholesterol HDL Cholesterol Systolic blood pressure Reply to 2 questions
FRAMINGHAM	Cardiovascular score	The FRAMINGHAM score estimates the risk of developing high blood pressure in the next four years. The use of this score is recommended by the American Heart Association.  Age Sex Height Weight Systolic blood press Diastolic blood press Reply to 8 questions	







# Preventive medicine BIONEXT type assessment

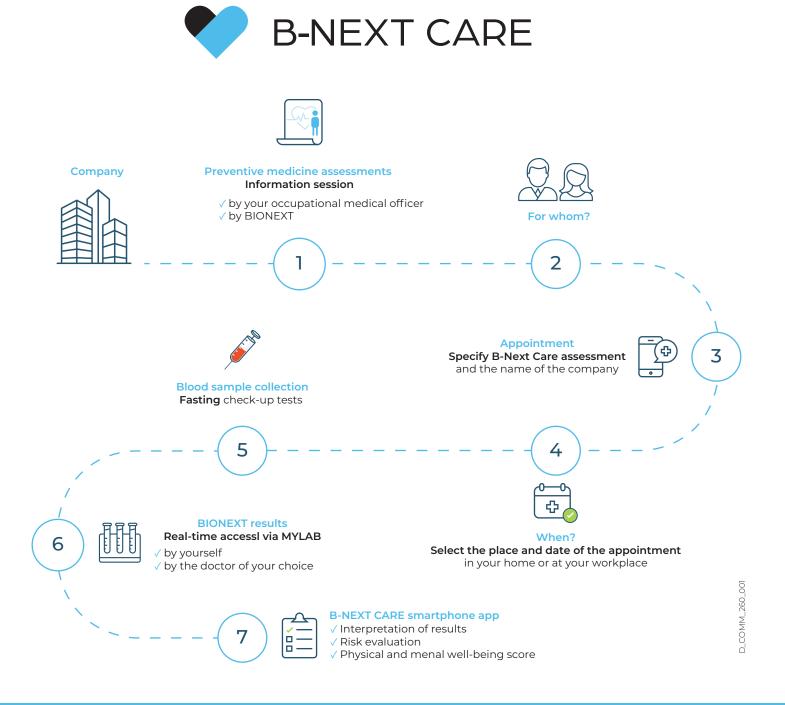
Measurement of physical constants	
Height	Systolic blood pressure
Weight	Diastolic blood pressure
Waist circumference	
Inflammatory assessment	
Albumin	Complete Blood Count
High-sensitivity CRP	
Cardiovascular assessment	
Total cholesterol	Triglycerides
LDL cholesterol	Cardiovascular risk score - SCORE2
HDL cholesterol	High blood pressure risk score - FRAMINGHAM
Non-HDL cholesterol	
Liver function assessment	
AST	Gamma-GT
ALT	
Carbohydrate metabolism assessment	
Blood sugar	Diabetes risk score - FINDRISC
HbAlc	
Kidney function assessment	
Uric acid	Creatinine
Urea	GFR
Iron assessment	
Ferritin	
Bone metabolism assessment	
Vitamin D	
Thyroid function assessment	
TSH	
Oxidative stress assessment	
Cuivre	Selenium
Zinc	
Urological assessment (for men above 50)	
PSA	







# Organise your assessment examinations as part of your preventive medicine programme



For more information, please contact us at +352 27 321 or by email to b2b@bionext.lu



www.mylab.lu

Service offered by BIONEXT for real-time access to the results from your smartphone or the website





www.pickendoheem.lu

Free-of-charge punctual blood sample collection service By appointment