

# BETTERAIR EFFICACY CASE STUDIES

SURFACES YEAST / 24h /OBJECTS PATHOGENIC BACTERIA / 1 WEEK  LAVATORY PATHOGENIC BACTERIA / 1 WEEK  AIR MOLD / 1 WEEK  AIR PATHOGENIC BACTERIA / 1 WEEK  FILTER YEAST / 72h MOLD			PRESENCE BEFORE TREATMENT	TIME TO NO DETECTION OR NORMAL ECOLOGY RESTORED
AIR MOLD / 1 WEEK  PATHOGENIC BACTERIA / 1 WEEK  PATHOGENIC BACTERIA / 1 WEEK  PATHOGENIC BACTERIA / 72h  MOLD / 72h  MOLD / 72h  MOLD / 72h  PATHOGENIC BACTERIA / 72h  AIR DUCT PATHOGENIC BACTERIA / 2 WEEKS	<b>I⊢</b> /	MOLD	✓ ·	24h
FILTER  YEAST MOLD PATHOGENIC BACTERIA  FILTER  YEAST MOLD PATHOGENIC BACTERIA  AIR DUCT  PATHOGENIC BACTERIA  Z WEEKS	LAVATO	DV		
FILTER MOLD / 72h PATHOGENIC BACTERIA / 72h  AIR DUCT PATHOGENIC BACTERIA / 2 WEEKS	AIR			
AIR DUCT PATHOGENIC BACTERIA / 2 WEEKS	FILTER	MOLD	<i>'</i>	72h
FLOOR ORGANIC IRRITANTS / 4 WEEKS	AIR DUC	PATHOGENIC BACTERIA	<b>✓</b>	2 WEEKS
	FLOOF	ORGANIC IRRITANTS	✓	4 WEEKS

## ✓ present in samples

NORMAL ECOLOGY = LEVELS REDUCED TO WHERE THERE IS NO NEGATIVE HEALTH EFFECTS ON A HEALTHY PERSON

### INDEPENDENT TESTING

ALL TEST RESULTS WERE EVALUATED BY INDEPENDENT LABORATORIES - HAYES MICROBIAL CONSULTING, UNIVERSITY OF WISCONSIN DEPARTMENT OF BIOLOGY, EMSL ANALYTICAL, INC. LOCATIONS

SAMPLES WERE OBTAINED FROM AIRPLANES, MEDICAL, COMMERCIAL AND RESIDENTIAL ENVIRONMENTS.

### STRAINS OF BACTERIA AND FUNGI

STRAINS OF BACTERIA IDENTIFIED INCLUDED STAPHYLOCOCCUS, PSEUDOMONAS, MICROCOCCUS, ASPERGILLUS, FERMENTER AND NON-FERMENTER GRAM NEGATIVE BACTERIA. FUNGI, INCLUDING MOLD AND YEAST INCLUDED CLADOSPORIUM, AUREOBASIDIUM AND RHODOTORULA.





• Independent in-vivo and in-vitro laboratory tests have substantiated the efficacy of BetterAir formulation on the following pollutants, irritants and pathogenic strains in various environments:

**BACTERIA** 



**FUNGI** 



**ALLERGENS** 



**ESCHERICHIA COLI** 

PSEUDOMONAS AERUGINOSA

**BACILLUS CEREUS** 

STAPHYLOCOCCUS AUREUS

SALMONELLA TYPHI

LISTERIA INOCUA

MICROCOCCUS\*

**CLADOSPORIUM** 

ALTERNARIA ALTERNATA

PENICILLIUM CHRYSOGENUM

**ASPERGILLUS\*** 

RHODOTORULA\*

**AUREOBASIDIUM\*** 

**RHIZOPUS\*** 

**DUST MITE ALLERGENS\*** 

PET ALLERGENS\*

COCKROACH ALLERGENS\*



## BETTERAIR TESTING IN AIRPLANES





4 TYPES OF PATHOGENIC BACTERIA AND FUNGI IDENTIFIED ON:



LAVATORY SURFACES



**GENERAL SURFACES** 



**AIR** 

PATHOGENIC BACTERIA B1 AND B2 WERE DIMINISHED AFTER 1 DAY,

NORMAL BACTERIAL ECOLOGY WAS RESTORED WITHIN 1 MONTH.

NO RECURRENCE OF PATHOGENIC BACTERIA WITHIN THE 1 MONTH TESTING PERIOD.

### STRAINS OF BACTERIA FOUND IN SAMPLES

B1 - STAPHYLOCOCCUS

B2 - MICROCOCCUS

B3 - PATHOGENIC FERMENTER BACTERIA
B4 - PATHOGENIC NON-FERMENTER BACTERIA

FUNGI F1 WAS DIMINISHED AFTER 1 DAY, F2 AND F3 AFTER 2 DAYS.

NORMAL FUNGI ECOLOGY WAS RESTORED WITHIN 1 MONTH.

NO RECURRENCE OF FUNGI WITHIN THE 1 MONTH TESTING PERIOD.

### STRAINS OF FUNGI FOUND IN SAMPLES

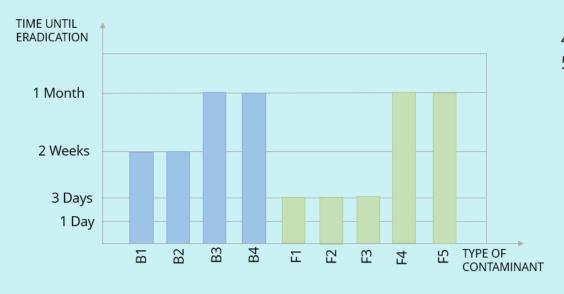
F1 - AUREOBASIDIUM F2 - RHODOTORULA

F3 - YEAST

F4 - CLADOSPORIUM

## BETTERAIR TESTING IN MEDICAL FACILITIES





4 TYPES OF PATHOGENIC BACTERIA AND 5 TYPES OF FUNGI WERE FOUND ON:



**AIR FILTERS** 



**GENERAL SURFACES** 



AIR



**VENTILATION DUCT** 

PATHOGENIC BACTERIA B1 AND B2 WERE DIMINISHED AFTER 2 WEEKS.

NORMAL BACTERIAL ECOLOGY WAS RESTORED WITHIN 1 MONTH.

NO RECURRENCE OF PATHOGENIC BACTERIA WITHIN THE 1 MONTH TESTING PERIOD.

STRAINS OF BACTERIA FOUND IN SAMPLES

**B1 - FECAL MATTER INDICATOR** 

B2 - PATHOGENIC GRAM NEGATIVE BACTERIA

**B3 - PSEUDOMONAS SP** 

B4 - STAPHYLOCOCCUS SP

FUNGI F, F2 AND F3 WERE DIMINISHED AFTER 3 DAYS,

NORMAL FUNGI ECOLOGY WAS RESTORED WITHIN 1 MONTH.

NO RECURRENCE OF FUNGI WITHIN THE 1 MONTH TESTING PERIOD.

STRAINS OF FUNGI FOUND IN SAMPLES

F1 - YEAST

F2 - ASPERGILLUS

F3 - ALTERNARIA

F4 - CLADOSPORIUM

F5 - RHIZOPUS

## BETTERAIR TESTING IN HOMES



TWO ROOMS OF A RESIDENTIAL HOME WERE TESTED - FAMILY ROOM AND BEDROOM.

TOTAL OF 4 TYPES OF ALLERGENS WERE FOUND IN THE SAMPLES.

THE SAMPLES WERE COLLECTED FROM THE FLOOR



AFTER 1 MONTH OF USE, DUST MITE ALLERGENS TYPE 2,
PET AND COCKROACH ALLERGENS HAD DIMINISHED.
TYPE A1 ALLERGENS IN FAMILY ROOM WERE
REDUCED BY 95%.

PROBIOTIC BACTERIA SIGNIFICANTLY REDUCED OR COMPLETELY DIMINISHED ORGANIC IRRITANTS THAT ARE THE MAIN CAUSE FOR ALLERGIES AT HOMES.

## TYPES OF IRRITANTS FOUND IN SAMPLES

- A1 DUST MITE ALLERGEN TYPE 1
- A2 DUST MITE ALLERGEN TYPE 2
- A3 CAT ALLERGEN
- A4 COCKROACH ALLERGEN

## BETTERAIR CASE STUDY LOCATIONS

## **MEDICAL**

## COMMERCIAL

## **RESIDENTIAL**

## **AVIATION**



Beit Gadi Medical Center in Netanya, Israel



Azrieli Towers in Tel Aviv, Israel



Residential building in West Palm Beach, Florida, U.S.



International Airline, Boeing 777



Care Partners Assisted Llving in Little Chute, Wisconsin, U.S.



Beit Rubinstein in Tel Aviv, Israel