

# MOULD TECHNICAL BULLETIN



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## FOOD SOURCES FOR MOULD



Today we are surrounded by excellent food sources for microorganism growth. Every room of our home or office is a candidate for mould growth. Mould can grow on any organic material and on the dust settled on

any non-organic materials. Therefore, there is always a food source for moulds in our homes and offices. Mould grows by digesting the organic substance it lands upon.

Some common food sources found in buildings are:

- Dry wall and ceiling tiles;
- Wallpaper and paint;
- Carpeting and wood floors;
- Vinyl floor cushion backing;
- Wood framing and furniture;
- Fabrics (cotton, wool);
- Cellulose insulation;
- Porous and foam insulation materials;
- Some plastics: and
- Discarded and spilled food products.

Basements, crawl spaces, bathrooms, and cold exterior walls are most commonly where mould growth appears. Fungi (mould) can cause wood to rot and structural damage not to mention the health concerns. This makes it very important to keep paper and cellulose materials up and away from damp areas. Dry out damp areas immediately on discovery.

The critical requirement for mould growth is moisture. Moulds grow best under conditions of high humidity or in places where water accumulates. Generally organic materials can develop mould if they remain wet for 24 to 48 hours. It is critical to respond quickly to water issues.

### Drywall

Drywall is a paper based product which is ideal for mould growth.

### Plaster

Plaster walls are typically a lot less vulnerable to serious mould problems because they are lime based. However, the wood lath or gypsum lath will sustain mould growth.

### Insulation

In general, mould does not grow well on insulation. However, there are insulations that mould will flourish in. It is best to have insulation checked for microbial growth.

### Wood

Wood is a great food source for mould. Because wood is porous mould spores will find their way into the cellular structure of the wood. Rapid deterioration could occur.

### Concrete

Concrete will not sustain mould growth. However, if the concrete has been painted or there is dirt on the wall mould may grow on the paint or dirt.



## Tiles

Tiles and grout in shower stalls and tubs are very favourable places for mould to grow. This is due mostly to the high humidity found in the tub or shower area. Most times when mould is left unabated the mould hyphs will penetrate the porous grout joints. This mould cannot be properly removed without removal of the grout and sometimes the tile. To prevent mould growth, squeegee or wipe tiles following a bath or shower. Also, leave the exhaust fan on for at least a half hour after a shower to remove the high humidity.

## Carpet

Carpets accumulate dirt and mould spores and naturally trap and retain moisture which makes them an issue.

Carpet should never be installed on floors that are likely to become wet (e.g. bathrooms, kitchens). Use caution when installing carpets in basements. Clean carpets at least once a year.

## Mattresses and bedding

Because we spend many hours in close proximity to mattresses and bedding, we need to apply higher standards. The combination of nightly warmth, humidity (moisture from our bodies) together with an ample supply of shed skin flakes creates an ideal habitat for the mites and microorganisms. Do not make the bed up as soon as you get up. Give the bed a chance to dry out before you lock the moisture in. Mould bed bugs and dust mites like a moist environment.

Discard mouldy mattresses. Mattresses and bedding that have been stored in a wet area should also be discarded.

Plush toys should be considered bedding as they are often used as pillows and held close to children's faces.



## Books and paper

Paper products are made of cellulose, a highly favourable growth medium for moulds. Paper products are moreover strongly absorbent, can store large amounts of moisture and are resistant to drying. This combination of properties makes paper stored in damp conditions especially susceptible to mould damage. Store paper goods in plastic containers.

## Sources:

Indoor Air Quality Association  
National Association for Moisture Management  
Canada Mortgage and Housing Corporation  
Fungal Contamination: A Comprehensive Guide for Remediation; Michael Pinto, Ph.D.

**Next Month:** Relative Humidity

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