GERM WARFARE
By Michael Das

What you don't see can hurt you. Here's how to protect yourself against the nasty bugs and micro-organisms that may be lurking in the gym.

Germs love the gym. Just take a quick look around next time you're in one and you'll see why. Notice all the bodies in close proximity, sweating? That gives germs the moist environment they need to thrive. Next, check out all the barbells, weight benches, floor mats and stationary bikes. They comprise a forest of inanimate objects that scientists call finites, and they provide ample surfaces for germs to lurk. Now take a look at your hands.

They spend a lot of time gripping, pushing and pulling those vomited, and they make for an unwitting and highly effective transportation system. You're constantly encountering and carrying germs from station to station, and with one accidental wipe, you could infect yourself or another person.

"Most cold and flu viruses are transmitted by someone touching someone or through fomites," says Barbara Hanson, associate professor of biology at Canisius College in Buffalo, New York.

"Droplets from someone's nose may fall on the gym equipment, then the next person may touch it and rub his or her nose. Then they're infected." That's good luck for germs, and we haven't even taken into account what's lurking back in the shower stalls, whirlpools, steam rooms, swimming pools, sinks and toilets. Large quantities of water and the everyday sanitation problems posed by public toilets offer a whole other set of germ worries. Locker-room threats include athlete's foot, jock itch, Giardia and even ringworm. Every day the microscopic warriors that cause these afflictions are multiplying, moving and battling to colonize you - particularly during winter when people tend to congregate in crowded, closed-off spaces and flu season is at its peak.

Fortunately, it's not as bad as it might seem. If you go to the gym regularly, you've got a lot of things going for you in the fight against germs. You're likely to have a stronger immune system than a person who doesn't work out and, thus, you can combat germs better than the general population. You're also likely to have less infectious diseases to pass around.

The germs commonly found in gyms are generally the same germs found on the doorknobs, sinks and hand rails you come in constant contact with outside the gym, and the majority are quite harmless. A few, like the common cold virus, can trip you up for days or weeks, and a select few can knock you out for a longer period. It's unlikely you'll pick up something so terrible, though.

"Anyone who says there's a great risk of infection attending a gym is an alarmist," states Winkler Weinberg, MD, chairman of the Georgia Pacific Health Smart Institute and author of No Germs Allowed. "But there's no harm in being careful."

Know Your Enemy
What should you do first? Get to know your enemy. Four major types of micro-organisms are common in the gym: Bacteria. These single-celled organisms colonize people and finites, including towels and showerheads. Typical strains include staphylococcus aureus and streptococci. Both can cause bad skin inferiors. Outbreaks have been known to occur among sports teams," Weinberg notes. "Staph is one of the most common infections known to man." At the extreme, certain strains of bacteria can cause pneumonia.

Fungi. More complex but still single-celled organisms, they tend to thrive in places with lots of moisture. Common types cause noted gym afflictions like athlete's foot and jock itch. Others can be much worse. Generally, certain people are more prone to fungal infection than others. "Your susceptibility level depends on your body chemistry explains Hanson. "It depends on a variety of things from your chemical makeup and the amount you sweat."
it's slightly different for everybody."

**Protozoa.** Another single-cell organism, common protozoa like Giardia can be found in hot tubs, whirlpools and swimming pools that haven't been properly sanitized, Protozoa are the rarest of the four major gym-germ threats.

**Viruses.** They're more complex than the other three organisms, and they require a host to survive. Cold and influenza viruses are the most common. They're transmitted via finites, person-to-person contact and, less often than you might think, sneezing.

"Sneezes leave the mouth at 200 miles per hour." Weinberg points out. "But they don't go more than 3 feet" Only 25% of the time are people indexed directly from sneezes in the face says Hanson. Once viruses infer your body, they tend to stay in the respiratory tract, infecting other cells to make more virus particles.

**Sanitation Solutions**
While these types of germs are wildly different from each other in composition, they do have several things in common. First, only a very small possibility exists that any of them can be passed along via sweat, even if the sweat is from a person who has a cold or the flu "The actual sweat is really not a problem," states Herbert DuPont, MD, professor of medical sciences at The University of Texas Health Science Center at Houston. "It's primarily the moisture from sweat that causes problems by helping germs grow."

Many germs also have a very short lifespan, dissipating before they can colonise or infer you. The germs that do remain potent for extended periods - certain common viruses have been known to linger for several hours and, in some cases, days - are the ones that pose problems.

Gym owners and public health officials, of course, know this. Most gyms have to maintain the necessary level of cleanliness in keeping with the FIA. Typically, hot tubs and swimming pools are inspired to ensure that proper levels of germ-fighting chlorine or bromine are maintained. Locker rooms and public toilets are similarly inspected. The sanitation of the weights, machines and other equipment, however, generally falls under the jurisdiction of the gym.

Most owners do everything in their power to keep their gyms tidy and germ-free. Milos Sarcev, pro bodybuilder and owner of the Powerhouse Gym in Fullerton, California for instance, says he's adamant about keeping his gym up to scratch. A cleaning crew sanitizes the equipment twice a day, once after the morning rush and again after the afternoon crunch. The staff checks up on the bathroom every hour.

Powerhouse also has a mandatory towel policy: Everyone carries a towel and must wipe down the equipment before moving on to another station. Every reputable gym has or should have a similarly thorough sanitation policy. "If you're looking for a gym, you should ask questions about sanitization," Hanson suggests. "Ask how often they sanitize equipment. Ask if they have a wipe-down policy. At minimum, a gym should be sanitized once a day."

It's a good idea to have a cleaning regimen at your home gym, too. Hanson advises wiping down just as you would in a public gym, and that you thoroughly clean the entire area every week or two with soap and water or a common disinfectant like Lysol.

"Germs need a critical mass to colonize you," she explains. "And if you can keep things clean, it really reduces the chance of getting an infection."

**Battling Bugs**
Even with such a commitment to cleanliness, it's impossible to completely eliminate germs from a gym environment. At some point you have to take responsibility for your own safety. With an understanding of the little buggers, and a little common sense, you can further reduce your chances of exposure.
Germs have several methods of attack and in most cases, they won't be successful unless you give them an opening. The first thing you should do is wash your hands and dry them thoroughly. Germs crave moisture: do everything in your power to reduce the wet spots around you. That means wiping down equipment after you use it. Carry a towel with you. Carry two - one to wipe equipment, and one to wipe yourself down - if you want to be extra courteous. Use different coloured towels so you know not to wipe your body with your equipment towel, and vice versa.

Wiping helps eliminate moisture but it won't eliminate germs. Yet don't be alarmed about being infected by most germs through your skin. The risk of infection from bacteria and viruses through general contact is almost zero. If you have a scrape, cut or any sort of abrasion, however, you're asking for it. "People with skin abrasions or inferiors should cover up with a Band-Aid to help stop transmission," Hanson notes. "Wearing a shirt is a good idea, too." Gloves also work to cover up nicks and cuts on the hands. Understand, though, that wearing them doesn't preclude you from picking up and spreading germs.

The germs picked up by scrape-free bodies and hands most likely won't be able to infect you - unless you rub an exposed infected area on your body with your hands and then you rub your hands on your eyes, nose or mouth. Picking up a germ from an indexed surface or person with your hands, then putting your hands to those vulnerable spots on your face, is perhaps the most common method of transmission. Celebrity exhibit A: Indianapolis Colts quarterback Peyton Manning had a bout with blurred vision during the preseason caused, it Is believed, by baking someone's hand, picking up a virus and rubbing it into shaking someone's hand, picking up a virus and rubbing it into his right eye.

Wet areas in the gym offer further germ problems. Again, fight back with common sense. Don't rub your eyes, ears or nose. If you have fresh scrapes or cuts, skip the tub and head straight for the showers. Just don't go there without some sort of shower shoes, particularly if you're vulnerable to fungal infections like athlete's foot.

After your post-workout shower - which should be taken immediately to eliminate germs you may have picked up and to keep your normal germ population at a reasonable level - dry off thoroughly with a clean towel. In a pinch, use disposable paper towels. "When I go to the gym I wash very carefully, and that's what people should do," says DuPont. "But in the big scheme, you really shouldn't worry about germs in a gym setting. Let's put it in perspective: Going to the gym is a good thing to do and a safe thing to do.
You're not going to lose ground from an overall health standpoint."

Colds, the Flu and the Gym
Though colds and the flu are more prevalent this time of year, that doesn't mean you should stay away from the gym. If you follow proper germ safety practices - wipe down equipment, wear shower slippers, wash thoroughly, and cover up cuts and abrasions - your risk of exposure during cold and flu season is about the same as it is normally.

What if you're the one with the cold? "If you feel up for it, there's no reason you can't go to the gym," says Winkler Weinberg, MD, chairman of the Georgia Pacific Health Smart Institute and author of No Germs Allowed. "But you should be a good citizen and be careful that you wash your hands and that you don't cough or sneeze on the equipment." Another good rule of thumb is to stick with your training schedule if your symptoms are in your head, but stay home if they're in your chest.

The first defense against germs is effective sanitation. The Biomist™ Power Sanitizing System is the first safe method of power spraying an alcohol-based sanitizer. Biomist™ is non-corrosive and will not harm any metals - an excellent sanitizing solution for gyms and gym equipment.