

Are Your Design and Furnishing Choices Making People Sick?



How many hours a week are you spending at work? What are you doing there?

For most office workers, the answer to the second question probably includes "sitting and breathing." But what are the health implications of sitting at a desk, breathing that office air?

It turns out that [workplaces](#) can literally be making people sick. Modern life, especially for desk-bound office workers, has become increasingly sedentary. Most adult Australians do not achieve the minimum recommended 30 minutes of physical activity five days a week. Nor do they walk the 10,000 steps a day advised for good health. With public health officials going

so far as to claim that sitting is the new smoking, we are facing a crisis. The cherry on top of this inactivity is issues with [air quality](#) within the workspace and associated respiratory health problems and other illnesses.

As architects and designers, you might think your role is all about functionality and aesthetics, but in actual fact our professional choices can have a significant impact on people's health. This includes both the layout and configurations of spaces, and the furnishings within those spaces. The connection between architecture, [design](#) and health is generating new spheres of research that is informing architectural practice. So, how can architecture and interior design make workplaces healthier?

Make 'em walk

One simple way to improve health is by designing office spaces that intentionally require walking, for example to collect printed materials. Despite the promises of technology to enable a paperless office, most people will still print out a reasonable number of documents on any given day. Having a single, centralised and networked printer available for your team members will force people to stand up from their desks and walk to collect their printouts. These types of printers are also usually more cost effective than having a desk printer for all employees.

Similarly, the locations of bathrooms and kitchen facilities can encourage movement throughout the day.

Rethink furniture choices

One of the emerging trends in workplaces and [ergonomics](#) is the adoption of variable desks that allow workers to easily switch between sitting and standing. "But height-adjustable desks are outside of our budget," I hear you cry. Good news: there is a range of less expensive options that sit on top of the existing desk surface, such as the Varidesk. For laptop users, another option is the StandStand, which is portable.

There is also a growing range of innovative desks that encourage movement while working. These include treadmill desks and exercise bike desks. With a hefty price tag, you probably wouldn't replace all the desks in an office with one, but you can consider including these types of desks as part of a hot-desking configuration.



Active desks are encouraging movement in the workplace

The tendency of many designers is to prioritise aesthetics, functionality and budget when recommending furnishings, but the materials used in these furnishings is also a significant health consideration. Many materials release volatile organic compounds (VOCs), which can trigger symptoms ranging from eye, nose and throat irritation, nausea, dizziness and headaches, through to increased risk of cancer and central nervous system damage with long-term exposure to high levels of VOCs.

Rethink meeting spaces

When discussing meeting spaces with clients, is your first instinct to start thinking about big tables and chairs? I'd hazard a guess that the answer is yes, yet meeting rooms are a perfect space to consider reconfiguring to prioritise standing. To facilitate taking notes, you could consider tall, slim line tables that people can stand and write at. By not having the room dominated by a big table, this can also create a space for office workers to engage in other forms of movement, like corporate lunchtime yoga classes.



The boardroom table is being replaced with more collaborative, stand-up meeting areas

Climbing the corporate ladder

For offices than span multiple floors, consider how the placement of a staircase could encourage people to take the stairs rather than an elevator between floors. Staircases don't only need to be for fire exits but can form an integral part of an office design. The Medibank Private building in Melbourne is a fantastic example of how staircases have been incorporated into the design to encourage movement – just as one would expect from a health insurer, and an excellent example to aspire towards.

Get your greens

Indoor plants aren't just for aesthetics. While fake plants might look the part (and be immune to neglect) they don't hit the mark. According to a Norwegian study, introducing plants to a workplace led to:

- A 30 per cent reduction in reported fatigue
- A 24 per cent reduction in mucous membrane symptoms including coughs, sore throats, stuffy noses and eye irritation
- A 23 per cent reduction in dry skin complaints

These benefits were likely a result of improved air quality and the psychological value of a more pleasant environment. The researchers also speculated that the presence of plants increased the humidity, which could influence mucous membrane systems, and clean chemicals in the air.

Separate research has demonstrated that plants in the workplace can help to relax employees, lower stress levels and boost productivity. Recent research from the University of Melbourne found that looking at a green roof boosted attention spans, and the researchers now intend to investigate if workplace greening makes people be more creative and helpful.

What are your tips for designing for health? Have you made design choices with the intention of helping people to be healthier?



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With over 20 year's architectural experience, she is the eponymous principal of Ruth Newman Architect. For Ruth, architecture is fulfilling due to its diversity. "Being able to create a space that meets our clients' requirements – such as designing a home that works today for a couple witho...