

Editorial

Nowadays, more and more youngsters wear cosmetic contact lenses to make their eyes appear bigger and brighter. Could these cosmetic contact lenses be so miraculous? Are they harmful to the eyes?

With the rapid advancement in information technology, we are spending more and more time on smart phones and computers. How can we protect our eyes when using these electronic products?

Transition lenses are clear in indoor lighting conditions but will turn dark when exposed to sunlight. Ideally, the wearer of transition lenses could wear them in varying lighting conditions and could also protect their eyes from harmful UVs. However, the cost of transition lenses is much higher than traditional sunglasses. Are they worth the money?

The optometrists of Student Health Service explained to us the proper ways and safety precautions to take when using these mentioned products. Let's adopt some good habits to protect our eyes while enjoying these technological products.



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From the Editor

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Caring for your eyes

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Introduction:

With the advance in technology, more and more new products are available in the market. Although these new inventions could make our lives more convenient and enjoyable, they could affect our health as well if they are not used properly. Therefore, it is important for us to take safety precautions and use them properly.

Let us introduce several popular products to you that could affect your vision and health.



Cosmetic Contact Lens

What are cosmetic contact lens?

Corrective contact lenses are designed to improve vision, most commonly by correcting refractive error. This is done by directly focusing the light so that it enters the eye with the proper intensity for clear vision. Cosmetic contact lens are tinted with different colours and are designed to change the appearance of the eye though it may also correct refractive error.

Cosmetic lenses are very popular in Hong Kong. These cosmetic lenses give the appearance of the iris onto the sclera resulting in the eye to appear bigger with wider iris, making the eye looks more beautiful and charming. They are readily available in the market and can even be purchased from shops other than optical shops.



What are the problems associated with cosmetic contact lens?

In the past, people chose to wear contact lens to correct their vision and they went to professional optometrists to check their refractive error and curvature of the cornea. However, those persons who choose to wear cosmetic contact lens may not have vision problems and do not know that they have to get prescriptions from the optometrists. They may simply buy the cosmetic lens from cosmetic shops or through the internet because it is more convenient and the prices are cheaper.

Wearing such cosmetic contact lens without examining for correct curvature may lead to swelling or inflammation of the cornea. Moreover, they may not have been taught how to take care of the cosmetic contact lens. They may not know how to clean and disinfect the lens properly. Bacteria may accumulate on the lens surface and cause infections to the eye as well.

Cosmetic contact lens and the health of the eye

Different brands and types of cosmetic contact lenses may have different sizes and curvatures which may not suit everyone. It is essential to have a professional optometrist to examine the curvatures of the corneas and the conditions of the eyes. Unfit contact lens and improper use of contact lens could induce dry eye and blurred vision, cause infection as well as resulting in permanent damage to the eye in serious cases.

Tips of wearing contact lens:

1. Wear contact lenses prescribed by professional optometrists only. Do not purchase contact lens from cosmetic shops or through other channels.
2. Follow the advice given by the optometrists and should not prolong the wearing schedule as this may affect their vision and health of the eyes.
3. Conduct regular check-ups with their optometrists.
4. Practice good hygiene. Follow instruction to clean and disinfect the lens.
5. Clean and change the carrying case regularly so as to reduce the chance of eye infections.
6. Stop wearing the contact lens and go for an eye examination whenever you feel uncomfortable and grittiness in your eyes.

Smart Phones and Computers

Smart phones, computers and eye care

Smart phones and computers are very common nowadays. People of different ages use them in the office, restaurants and even on public transport to read and play games. However, these products could affect the health of our eyes.

1. Under normal conditions, we blink 15 to 20 times in a minute. Blinking automatically applies moisture to our eyes, to keep them from drying out, and to keep foreign matter from entering and irritating our eyes. However, the number of blinking is reduced when the eyes are concentrating on the screen of the



smart phones or computers. They will feel tired and dry easily and very often result in red eyes and blurred vision if this practice persists.

2. When people are reading from the screen of the smart phones or tablet computers, their reading distance is much less than when reading a book or newspaper and they would hold the device nearer and nearer to their eyes when they get excited. The short reading distance together with the small font size would require extra efforts from the eyes to accommodate, which may result in headache, eye fatigue and blurred vision. They may develop problems with refractive error.
3. The high illumination density ($300\text{-}500\text{cd/m}^2$) of the tablet computer screen could affect the health of our eyes. This light from the screen could lead to retinal and macula problems and diminish their visual acuity.

Safety precautions when using smart phones and computers

1. Do not use these products for a long period. It is important to rest your eyes for a few minutes after using them for half an hour to prevent eye fatigue.
2. Always keep a reading distance of at least 30 cm when using smart phones. It is even better to keep a reading distance of 40-60cm when using computers.
3. The lighting of the surrounding should not be too strong or weak. To avoid shadows, the direction of light should be in front from the left.
4. The illumination level of the screen should be adjusted to a comfortable level.
5. Do not use these products when traveling in a moving vehicle.
6. Rest and relax your eyes by participating in outdoor activities.
7. Parents should pay attention to the children's postures and bring them for eye examinations if they like to tilt their heads or squint to one side.

Transition Lens

What are transition lenses?

Transition lenses are clear lenses that react with ultraviolet radiation (UV) and produce a tint effect based on the amount of UV present.

Transition lenses will provide the correct amount of protection under varying lighting conditions. Wearing transition lenses on a dull day will produce a very pale tint. On a sunny day where more ultraviolet radiation is present they will turn quite dark to protect your eyes from the harmful UVA and UVB. When going indoors,



the lens will become transparent. Transition lenses provide continuous comfort by reducing glare and avoid eye fatigue.

Use of transition lens and special reminder:

1. Transition lens are very convenient and safe to use but it does not provide enough protection in the following cases:
 - i. When driving, the car windscreen will block a certain amount of UV which is required to make the lens react. Therefore, these lenses will not work as well as they would in the outside of the car. If there is dazzling light in the surrounding, the driver may still experience glare as the transition lens is not dark enough.
 - ii. Persons who are particularly sensitive to light (those with dilated pupils or had eye surgery) and already experiencing glare indoors would find transition lens not dark enough to meet their needs. They would need sunglasses to protect them from the strong sunlight outdoors.
 - iii. People working outdoors, playing water sports or skiing should wear sunglasses to protect themselves from the strong UV.
2. The surface coating of the transition lens can be scratched and damaged easily which will affect its efficiency of photo-transition.
3. Under normal circumstances, when the transition lens are exposed to the UV, it take about half a minute for it to change from transparent to dark colour depending on the intensity of UV. However, it takes longer for it to change from dark colour back to transparent when returning to indoor environment.
4. The life of the transition lens is limited; it is about 2 years on average. The ability to change colour will decrease and the tone of the colour may not be the same as when they were new.

Conclusion:

When we use new technological products, we should use them properly and pay attention to safety matters. We can then enjoy their benefits and use them to improve our quality of life.



In the past three months, we invited students to express their views on "Eye care". Many of them have expressed their views on this topic. Here are some of their suggestions :



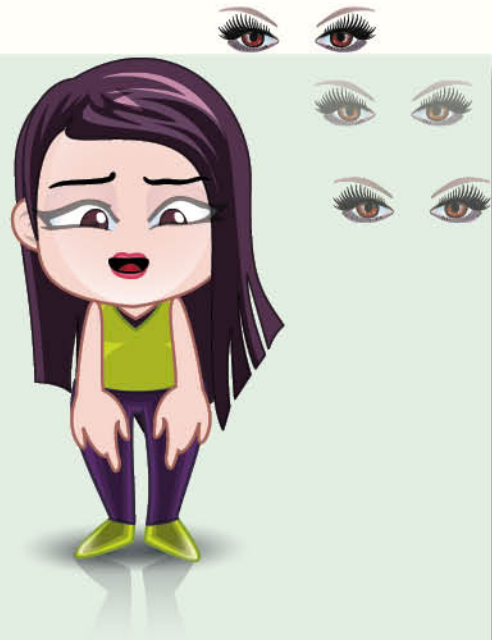
We use our eyes to see the world, to learn new things and to acquire new knowledge. That's why we need to protect our eyes with care. Recently we received a letter from Ling Ling, she has some concern about "Big Eye" contact lenses. Let's see what her problems are and how we can help her.

Dear Health Box,

How are you! I am 12 years old and I am a primary 6 student. Last week, I went with my sister to see her classmate. My sister found that her classmates' eyes looked different. My sister asked her why. She told her that she was wearing coloured contact lenses. She took off her contact lenses and let my sister tried them. I am worried that this might harm my sisters' eyes. If my sister decided to buy and wear these coloured contact lenses, what should I advice her? I am afraid that my sister will wear them to make herself look attractive.

Thank you!

Ling Ling



Dear Ling Ling,

Thank for your letter, I understand you are worried that wearing coloured contact lenses might harm your sisters' eyes. In fact, if your sister decided to wear contact lenses, you can suggest her to pay a visit to a registered optometrist. According to your sister's habits, her eye condition and curvature, the registered optometrist will recommend the correct lenses for her. In addition, we should not wear someone else's contact lenses, this will easily cause eye infections. So Ling Ling, you must tell your sister all these facts and let her make an informed decision. Thank you for your enquiry.

Wish you good health!!

Health Box.

Interesting knowledge Q&A

Which of the following is not healthy lifestyle for good eye care:

1. eat food rich in vitamin A e.g. Carrots
2. switch off all the lights when watching TV
3. consult registered optometrist for new spectacles
4. read under adequate and even lightings



(Answer: find it out from the newsletter)

Eye Care

If you want to have healthy eye sight, you should adopt healthy reading habits. You should read your book from a distance of not less than 30 cm and under adequate lighting. Please also do not read in bed or when you are traveling in a moving vehicle. When you use your smart phone/computer or play electronic games, don't forget to adjust the screen brightness to the lowest acceptable level.

We also need to eat foods which are rich in vitamin A e.g. red carrots, to keep our eyes healthy.

Health Tips

For enquiries of student's health problem, please write to "Health Box"

Please write your name & address, contact tel. no. in the letter.

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99 Kai Tin Road,
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Kowloon

Health Box