



# PRO-TEEN

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## News from the Association

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Youth Participation  
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Myths about Oral  
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Education is Prevention:  
The SWOVA Way

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## News from the Association

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### Acknowledgements

The onset of summer is marked by a tradition. It is a time when we wish to underline the efforts of all those who collaborated in the Association's activities and in the production of our official publication.

We would like to thank André Malo for the work he does as the coordinator of our main activities: he supervises the membership data bank, PRO-TEEN and other publications, he sees to the logistics for conferences, manages and organizes secretarial and computer work, and coordinates the work of collaborators. Mr Malo also coordinates the work under contracts for the Canadian Health Network.

Philippe Nechkov has done the layout and contribute to the articles for every issue of PRO-TEEN. We are grateful for the work done by all the members of the PRO-TEEN team. We also thank all of those who have sent us articles, and descriptions of their activities that have greatly contributed to the success and quality of the final product.

Our web site has benefited from the work of John Duong who developed our new interactive site.

We still hold our contract with the Canadian Health Network. The work as affiliate for the youth center of the Canadian Health Network site is carried out by André Malo, John Duong, Éric Villard, Philippe Nechkov and Frédéric Douesnard..

Within the Association, Philippe Nechkov managed the membership data bank and registered new members. David Blasco offered extra support to the established team.

I would like to mention the work accomplished by the organisation and scientific Committee for the Annual Conference of CAAH held October 30, 2002 in Toronto. Dr Eudice Goldberg presided this Committee with many members of the Adolescent Division of the Sick Children Hospital in Toronto. With more than 200 participants, this Conference was a success and contribute to the development of our Association.

#### **In conclusion,**

I am grateful to all members who promote our activities and support us. ***I encourage you to promote the activities of your association. Send us news, a description of your program or activities or an article for publication in the journal.*** Some of you have been members of CAAH for many years now and it is encouraging to see your names coming back as a sign of your appreciation of our work.

Have a nice summer,

Jean-Yves Frappier, President of CAAH



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## Scientific Events

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### IAAH Annual European Meeting

26-27 September 2003, Paris, France

The meeting of the European branch of the International Association for Adolescent Health will be held in the Institut Marie Curie in Paris, France. The main topic of the meeting will be "These Adolescents Coming from Elsewhere". Simultaneous translation from French to English will be available.

Topics include :

- 1) Knowing how and why they migrated.
- 2) Health status: consideration of their physical and mental condition; their accessibility to prevention and health; their integration at school ; which rights do they have and what laws apply to them; what will be their future in the new country.

3) Measures to prevent them from being victims of child abuse or being involved in delinquency and prostitution.

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## Articles

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### Youth Participation Programs

Reproduced from IAAH Newsletter  
International Association for Adolescent Health

There is always going to be a balance between youth directed projects run for youth, youth initiated projects run with the help of adults, and partnership between young people and adults in making projects of all sorts happen.

There are many examples of projects such as youth Advisory councils, Youth Councils and youth committees that have been set up to advise Local Government Councils (see [www.youth.nsw.gov.au](http://www.youth.nsw.gov.au) and [www.youthgas.com](http://www.youthgas.com) for more information on groups in Australia), or School or Trust Board Councils.

<http://www.youthgas.com/quickguides/participation.htm> is an excellent guide to examples of youth participation programmes in many areas of life.

[www.kids.nsw.gov.au](http://www.kids.nsw.gov.au) is another site full of great ideas on participation and how to make it happen.

Youth Participation in consultation can take many forms too, here are some examples from Australia again:

#### Creative consultation

- One was to make a big banner where they wrote their statement on whatever you asking and then hand printing it with fabric paint, you could use feet. This is heaps of fun.
- There was an issue with no go skateboard zones so- made a big picture on card board and young people rolled up tiny bits of paper to build the

image up who was a young dude riding a skateboard. This was great because we could chat about best skate spots and safety when skating.

- Recently for youth week we got huge pieces of cardboard and bent them to create a maze, this was really effective as the young people decorated the boards with issues relevant to them. The maze could then be used time and time again in schools and community.
- We have sometimes got vouchers for young people or prove pizzas. The creative stuff though seems to be a hit with the younger people.

(A **range of activities** is important to allow young people to opt in and out of activities. One of our most successful ideas was having **an art and craft area** at the Youth InterACT Public Conference on 18 Oct. If any young person got bored or wanted to leave the conference, they could do some craft instead. We found that because of this, no one was bored, no-one left and we also ended up with a beautiful patchwork quilt of delegates ideas and creativeness.)

#### Monthly newsletter

- A monthly newsletter that gives young people news. The newsletter could go out with the newsletter through the Department of Housing or the Local Council Community Services Data Base (for distribution) if they are agreeable.

**Workshops for young people**

We run workshops for young people, based on real skills that they can take away and use straight away! We have run them for schools, and local councils both during school holidays and within school time! Workshops have been written by us, having been volunteers on youth councils ourselves!

They include

- event management
- PR skills
- Facilitation skills
- Management of money
- setting up a business
- how to set up a youth council and more.

They are suitable for 12 to 20 year olds! You can find more info about us at [www.youth2youth.com.au](http://www.youth2youth.com.au)

From New Zealand some examples of the way local Councils can get young people in the City involved:

**Special Interest Forums** – Advocacy Office co-ordinates with outside organisations and other units of Council to hold forums for special interest groups to obtain information from young people.

**Youth Round Tables** – very successful, informal meetings with a group of young people, a method of touching base. The meetings can be geographically, ethnically, age, or anything based. It is an opportunity to find out how things are, what the young people want City Council to know / do. Information is then distributed to the relevant units of Council and organisations.

**Focus Groups** – often co-ordinated by the Advocacy Office, different units of Council consult young people on specific issues. For example, Skaters for a proposed skate park.

**Youth Database** – Young people to register their interests and how they wish to be consulted / involved, the type of involvement, email, face to face. Provides opportunity to network with a wider group of young people.

**Website(s)** – Many ways of using these to involve young people.

**Utilising “Youth Oriented Consultants”** – Utilising Young People as consultants, who can work with groups of young people more easily and feed back. Great examples of youth participation programmes in Canada can be found on [www.mcs.bc.ca/yps](http://www.mcs.bc.ca/yps). International Youth Foundation (<http://www.yfnet.org/>) and Youth Action Net (<http://www.youthactionnet.org/>) also give examples of youth involvement. For a really good summary of Canadian youth health initiatives see the Newsletter Vol 14 No 2 November 2001.

The UNFPA have many examples of youth in action, providing services and being involved in advocacy ([www.unfpa.org/adolescents](http://www.unfpa.org/adolescents)). To see how the World Council of Churches is coping visit <http://www.wcc-coe.org/wcc/assembly/or-8e-e.html>. The UN also run youth participation programmes, see <http://www.wcc-coe.org/wcc/assembly/or-8e-e.html> for more details of the Global Youth Network. Advocates for Youth have examples of peer education programmes, see <http://www.advocatesforyouth.org/peereducation.htm>. For some reasons for developing youth participation, see the UNICEF site <http://www.unicef.org/programme/youth/progapproach/progapp.html#parti>

There are many more examples I am sure from all over the world. We need to see these programmes evaluated in terms of positive outcomes for young people. Much has already been done, but in the next 2-3 years many congresses are going to focus on just these things.

**The following article has been included as an example of youth participation in running projects**



# Skate Park Management And Young People

**The following article has been included as an example of youth participation in running projects**

Some of the purported aims of young people managed skate parks:

- Increased young people's participation
- Ownership of the park and associated issues that arise from use of the park
- Crime prevention strategy
- Space regulation
- Safety improvement
- Increase diversity of use of the space

Key issues which are identified as having an impact on the successful management of a skate facility, particularly in the first year include:

1. Consistent and competent management of the skate park is vital to its success
2. Adequate funding for the maintenance, operational costs – including administration of the skate park will play a determining factor in management issues
3. Adequate funding for coaching clinics, training, events and marketing of the skate park will also be important
4. A good working relationship and open communication system with Council staff may be necessary
5. The continual use of a community development process that supports and focuses on the empowerment and learning of young people with the assistance by adults

## Skate Park Management Strategies

Having a Management Plan which involves young people that use the skate park. Involvement of young people can be formal (through a clear management group) or informal through consultation with the young skate park users on particular issues and responses.

### Regulation of the space:

#### Physical measures:

- A park which has natural surveillance – well situated, well lit
- Surface smooth, rubble free
- Barriers that prevent cars accessing the area to shine light on the park – permanent fencing
- Separate areas for novices and experts highlighted by signage
- Fencing to enclose the park at night (exclusionary)
- Barricades
- Young people do safety audits of the space – safety checklist

#### Policy and procedure development:

- Protocols for the use and management of the space
- Code of conduct for the space – developed in conjunction with young people that use the space (often there are already implicit codes of conduct/protocol for using the space amongst the young people that use the space – especially if the park is used by skaters, bikes and



blades at the same time) – codes for young people, management and volunteers. Codes can be for the use of a skatepark or for street skating as is the case in the Melbourne (Victoria) Skate Safe initiative.

- Designated preferred routes and no skate areas (determined in consultation with skaters)
- User and public safety
- Education and awareness programs – run in conjunction with school holidays or around skate events. Can involve input from Council, police, skate shops, young people!
- Operational maintenance
- Event bookings and use of the park policy
- Development and promotion of the sport policy
- Complaints policy

**Equipment Plan:**

For example the Palmerston North Skate Syndicate Inc. (NZ) (made up of young skaters) has a Memorandum of Understanding with the Palmerston North City Council to maintain the Railway Land Skate Park and require the items listed below to do this:

1. Hose and hose connections
2. Brooms, leaf rake, shovel
3. Padlocks and Allen keys
4. Rubbish bags
5. Cones
6. Water blaster
7. First aid kit and belt bag Tool kit
8. Lap-top computer and mobile phone
9. Hire items – trailer, PA system

**Management of hot/ key issues:**

When working with a skatepark management group often ‘hot issues’ (issues which require a response fairly quickly) will arise relating to use of the space that the management group may need/ want to respond to. Suggestions for dealing with hot issues in this context include:

1. Clarify the problem as it has been portrayed – i.e. bullying, insurance responsibilities etc

2. Call a meeting of the skate management crew / of user groups. This should preferably be done on site during peak use time. It maybe that the park does not have a management crew and the meeting called could be a public meeting – relevant management people should be there
3. Call on the services of an experienced, independent facilitator if necessary
4. Discuss the issues as a people self-managing issue – understanding the issue does a lot to solve the problem – so let everyone air their view with respect if not agreement from all in attendance (don’t let anyone go unvalued in making a contribution – this means encouraging confidence in some and conciseness in others)
5. Explore in an open minded manner about how well each pursuit is catered for in the community
6. Be clear about insurance costs and complications and communicate in - let them know in lay terms that:
  7. they are likely to be rate payers one day
  8. all facilities need user groups to maintain them and to set un/written codes of conduct that make them work
  9. money spent on insurance payouts comes off chances to improve local facilities for young people – eventually
  10. bullying or even insensitivity are losing stances in the medium and long term
  11. ask the group to come with solutions
  12. see if people who are aware of the problem can spend time nearby – vigilance can help settle problems - it may be that extra surveillance is a group solution –(maybe not also)
  13. Maybe do a role reversal exercise – get a good skater and bike rider to swap their vehicles and freewheel a mile in each others shoes – in front of the crowd and report back on what it felt like to be “on the other side”

**Pitfalls / negative issues relating to young people managed skate spaces:**

- Youth Participation: there can sometimes be diffi-





culty in getting sustained participation in the planning, design, implementation and management of a skate park. This can be for a number of reasons – long term projects mean people can move on, grow up, get tired of being involved, have new interests etc.

- The ideas can outweigh the ability or commitment to be involved.
- There are some issues with time for the older kids, who can be quite busy with work, study, sport and social life.
- Younger kids often have more time and their parents may organise to get them to meetings etc, but they can lack the technical understanding to take things further.
- Older young people have more to offer in terms of participation but have a lot of other demands on their precious time.

#### **Advice to combat some of these issues:**

- Get on board a couple of keen, dependable guys with good skating skills.
- Don't worry if no-one else turns up - a couple of solid members is a good start and will hold it all together while others come and go

#### **Money related issues:**

- SPAUSA suggest: You may need help with fund raising. There are some good sources available. Both Pepsi and Coke have been putting money into skateparks in exchange for the placement of vending machines (not sure if practised in Australia)
- Timber yards and construction companies have been known to donate the building supplies and labour. Other successful ideas include skate demos, concerts and donations.

#### **Resources of interest:**

**Local Government Association of Queensland** Guide to Developing and Managing Skate Facilities in Qld \$10.00 postage fee email: [Robyn\\_Robertson@lgaq.asn.au](mailto:Robyn_Robertson@lgaq.asn.au)

**Skate Park Association of America (SPAUSA)** SPA USA is a national (American) non profit organization that provides information to individuals and cities that are considering building a skatepark. Most information gets sent out to young skaters, free of charge, across the USA. Information is also supplied, free of charge, to cities and private individuals.

This organisation has a full guide to getting a skatepark in your community. The guide is full of helpful tips and contains heaps of website addresses and contacts. Also has a petition for getting a skate park attached.

## **Skate related websites of interest:**

[www.gawler.sa.gov.au](http://www.gawler.sa.gov.au)

Link to a skatepark developed through the Gawler Council, which was managed almost entirely by young people of the region. The group even formed their own management committee and became an incorporated body. I had two people tell me about this site. I had trouble downloading the available document on the site.

[www.skatelocate.com.au](http://www.skatelocate.com.au), [www.sk8parx.com.au](http://www.sk8parx.com.au)

Both of these sites contain guides/ rating guides to skate parks around Australia

[www.melbourne.vic.gov.au/skate](http://www.melbourne.vic.gov.au/skate)

The City of Melbourne has a city skating management program called Skatesafe that involves skaters along with a broad range of other stakeholders

[www.skateboard.com/iasc](http://www.skateboard.com/iasc)

International Association of Skateboard Companies

[www.bigdaddyinc.com](http://www.bigdaddyinc.com)

Robbie Matusich – does free design, layout and consultation for skate parks (American based but could be a good resource).

[www.mountain-inter.net/spectrum](http://www.mountain-inter.net/spectrum)

Spectrum Skatepark Creations: Jim Barnum- will help from square one – forming an organisation, lobbying



## Myths About Oral Contraceptives

### I. Taking a “Rest” from the Pill

One of the myths that has surrounded the use of oral contraceptives is the idea that a woman should periodically take a “rest” from pill use. The origin of this widespread and persistent myth has been attributed to a British practitioner who wrote a letter to a prominent medical journal during the 1960s, suggesting that women should get off the pill once a year, although no scientific evidence was offered to support this suggestion.

No evidence suggests that taking a rest from the pill is medically necessary or beneficial. On the other hand, taking a rest from the pill may lead to unintended pregnancy and induced abortion. Studies have found that a woman who stops taking the pill may not use another form of birth control or may switch to a less effective method, thus increasing her risk of unintended pregnancy.<sup>1,2</sup>

In addition, taking a rest from the pill can cause compliance problems. Side effects such as breakthrough bleeding, bloating, and nausea can result in early discontinuation of OCs. Discontinuing and restarting the pill may cause another few months of these side effects, which can discourage compliance. Given that no scientific evidence suggests a woman should take a rest from the pill, important advice for the patient is: “You do not need to take a ‘rest’ from the pill. Please call me first if you are thinking about stopping so we can discuss your concerns.”

### References

Pratt WF, Bachrach CA. What do women use when they stop using the pill? *Fam Plann Perspect* 1987;19:257-266.

Trussell J, Vaughan B. Contraceptive failure, method-related discontinuation, and resumption of use:

results from the 1995 National Survey of Family Growth. *Fam Plann Perspect* 1999;31:64-72,93.

### II. Birth Defects

Many women are concerned about the possibility of birth defects with oral contraceptive use. For example, 11% of teens seen in an adolescent clinic were concerned that the pill would cause birth defects.<sup>1</sup> Two review articles and a recent meta-analysis found no association between oral contraceptives and birth defects.<sup>2-4</sup>

A 1981 overview by Wilson and Brent found that the use of exogenous hormones, even during early pregnancy, was not associated with abnormality in nongenital organs and tissues.<sup>2</sup> No animal model has been able to demonstrate a causal relationship between administration of exogenous hormones in normal therapeutic doses, period of gestational development, and teratogenic effects. Furthermore, because hormones act specifically on target tissues, no reasonable biologic mechanism explains how exogenous sex hormones could act to damage nongenital fetal tissue.

A 1990 meta-analysis by Bracken calculated the relative risks of specific types of fetal malformations.<sup>4</sup> The relative risk from 12 prospective studies analyzed was 1.0 (95% CI, 0.8-1.2) for all malformations. Thus, no overall increased risk was found for birth defects. The specific relative risks for congenital heart and limb-reduction defects were 1.1 (95% CI, 0.7-1.6) and 1.0 (95% CI, 0.3-3.6), respectively.

These data provide strong evidence that exposure to OCs in early pregnancy does not result in birth defects. Furthermore, the progestin dosage of current OCs is so low that the hormone pose no risk of causing masculinization of a female fetus. A woman



who inadvertently takes OCs prior to or at the time of conception, or in early pregnancy, should be reassured that OCs do not cause birth defects.

### References

Emans SJ, Grace E, Woods ER, et al. Adolescents' compliance with the use of oral contraceptives. JAMA 1987;257:3377-3381.

Wilson JG, Brent RL. Are female sex hormones teratogenic? Am J Obstet Gynecol 1981;141:567-580.

Simpson JL, Phillips OP. Spermicides, hormonal contraception and congenital malformations. Adv Contracept 1990;6:141-167.

Bracken MB. Oral contraception and congenital malformations in offspring: a review and meta-analysis of the prospective studies. Obstet Gynecol 1990;76:552-557.

### III. Post-Pill Amenorrhea

Little evidence exists to suggest that oral contraceptives cause "post-pill amenorrhea." Reports of post-pill amenorrhea, or irregular menstruation and anovulation, began appearing in the 1960s.<sup>1,2</sup> Estimates of its frequency ranged from 0.2% to 3%.<sup>3</sup> Researchers found that post-pill amenorrhea was more likely to occur in women who had never given birth. The condition was unrelated to duration of use. Later reviews suggested that about half of post-pill amenorrhea cases were unrelated to OC use, and noted that OC use likely had masked an earlier condition. By 1981, estimates concerning post-pill amenorrhea indicated its occurrence to be less than 1 in 1,000.<sup>4</sup>

Because OCs are commonly used to treat menstrual cycle disorders, when OCs are discontinued, menstrual irregularity, including amenorrhea, often returns to its prior pattern.<sup>5</sup> Amenorrhea after discontinuation of OCs should be investigated to

determine its cause; however, OC use likely masked the condition, rather than caused it.

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Shearman RP. Amenorrhea after treatment with oral contraceptives. Lancet 1966;2: 1100-1101.

Whitelaw MJ, Nola VF, Kalman CF. Irregular menses, amenorrhea and infertility following synthetic progestational agents. JAMA 1966;195:780-782.

Rice-Wray E, Correu S, Gorodovsky J, et al. Return of ovulation after discontinuance of oral contraceptives. Fertil Steril 1967;18: 212-218.

Hull MGR, Bromham DR, Savage PE, et al. Post-pill amenorrhea: a causal study. Fertil Steril 1981;36:472-476.

Goldzieher JW, Zamah NM. Oral contraceptive side effects: where's the beef? Contraception 1995;52:327-335.

### IV. Stunted Growth Among Young Teens

Some young teens or their parents may be concerned about whether taking oral contraceptives will stunt a young woman's growth. The origin of this myth may stem from the known effect of estrogen on bone epiphyses. Young women predicted to have excessively tall stature are sometimes treated with high doses of estrogen for several years in order to accelerate bone maturation and limit final height. This practice may explain why an association has been suggested between OCs and incomplete growth.

Several factors make oral contraceptives unlikely to limit growth. Most young women are substantially past the age of menarche and have completed growth when OCs are prescribed. Skeletal maturation or "bone age" is often determined by comparing a radiograph of the wrist and hand with established standards. For example, a young woman found to have a bone age of 12.5 to 13 years (the typical age for menarche) has reached nearly 96% of final height. A young



woman with a bone age of 14 years has reached 98% of her final height. Most importantly, current OCs have one-third to one-tenth the estrogen as the typical doses that are used daily (not in cycles) to treat tall stature.<sup>1</sup> Moreover, a German study of mestranol 80 µg given in cycles with progestin found a satisfactory reduction in predicted height only in girls with a bone age of 9 to 10 years.<sup>2</sup> Thus, current low-dose oral contraceptives given after menarche are highly unlikely to affect final height.

## References

Prader A, Zachmann M. Treatment of excessively tall girls and boys with sex hormones. *Pediatrics* 1978;62(suppl):1202-1210.

Schambach H, Nitschke U. Treatment of constitutionally tall girls with physiological estrogen doses in the prepuberty period. An alternative to high-dose estrogen therapy. *Monatsschr-Kinderheilkd* 1985;133:32-37.

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# Psychosocial aspects of physical activity

Peter Nieman MD FRCPC FAAP

The health benefits of regular physical activity have been studied and are well described in the literature (1). The psychosocial benefits of regular physical activity, which are considered to be as important as the health benefits, are less clear (2).

The current data regarding the impact of physical activity on children's psychosocial health confirm an associative, rather than a causal link in many studies (3). Definitive research is also made difficult by the Hawthorne effect. The Hawthorne effect refers to subjects who change their behaviour as a result of being part of a study (4). Additionally, the type, duration or intensity of physical activity among the paediatric population that is necessary to achieve optimal, positive emotional and mental benefits, are poorly defined (2).

The intention of the present commentary is to scrutinize current thinking regarding the psychosocial aspects of regular physical activity. It will address the role of physical activity in:

- managing stress and anxiety in children and youth;
- reducing depression in children and youth;
- children and youth with attention deficit/hyperactivity disorder (ADHD), learning disorders and autism;
- developing self-esteem;
- intelligence and academic performance;
- reducing juvenile delinquency; and
- character development.

## Stress and anxiety management

The incidence of stress among children and youth has been described (5). Stress has become an ever-increasing and relevant problem in children (6). The etiology, diagnosis and treatment of childhood stress are well addressed in the literature (7). However, the role of exercise in stress management, although intuitively seen as potentially positive, is less well defined for the paediatric population. Data available in the adult population, regarding the benefits of exercise in reducing stress, seem more definitive (5).

Exercise may serve as an effective tranquilizer. Studies in adults indicate that 30 min of aerobic exercise reduces muscle tension by as much as does a dose of 400 mg of meprobamate (8). The relaxation effects were determined by subjective self-reports, through electroencephalogram changes and in the reduction of peripheral deep tendon reflexes. The mechanism by which physical activity reduces muscle tension is felt to be via a central, corticospinal effect (8).

The tension reduction induced by exercise lasts for 4 to 6 h in adults. The level and intensity of exercise may be important. Some studies suggest that only vigorous, sustained exercise lead to tension reduction; other studies suggest that moderate exercise is beneficial only when it occurs over an extended period and on a regular basis. An equal reduction of psychosocial stress occurs with both aerobic and anaerobic activities (9). Case reports in adults have indicated that regular physical activity may be helpful in the treatment of panic attacks and phobias (10).

It was observed that 30 min of movement training for 10 weeks reduced anxiety in healthy four-year-olds (11). Psychological testing and teachers' reports were



used to monitor participants' responses to activity. Physically fit college students were shown to handle stress better than unfit subjects (12). Similar results were found when girls aged 11 to 17 years were studied (13).

Competitive physical activity may lead to an increase in stress and anxiety; however, this increase is thought to be transient and mild, as long as the athlete is not pressured excessively by parents, teachers or coaches. Individual sports such as gymnastics, ballet, ice skating and wrestling generate more stress than do team sports, but, overall, the stress response to competitive sports is not worse than that of band competitions and academic stress, for example (14). Athletic competition may become destructive when the contest becomes linked to self-worth, personal integrity and the virtue of the players. Individuals who may be at an extra risk for developing stress as a result of athletic competition are those with low levels of self-esteem and low performance expectations (15).

## Depression

Depression among Canadian children aged 12 to 17 years is common. The incidence, unfortunately, is on an upward trend (16).

The mechanism by which physical activity may reduce the effects of depression is speculative at best. Psychological function is influenced strongly by blood levels of neurotransmitters such as noradrenaline, serotonin and dopamine. Depression has been associated with a depletion of neurotransmitters such as serotonin. Physical exercise increases the levels of central nervous system neurotransmitters.

In human studies, circulating sympathetic amines increase two to six times over resting levels after 30 min of vigorous exercise. Increased production of endogenous brain opiates, known as endorphins, can produce a morphine-like effect. The effect of these endogenous opiates has been shown in some studies to be reversible by the administration of naloxone, a narcotic antagonist (17).

One attempt to explain how regular physical activity may reduce depression is the 'Time-Out' theory. According to this theory, relief of depression results from exercise distracting and diverting the subject's attention away from environmental stressors (1).

The self-significance theory, which is not well tested, suggests that when an individual participates in physical activity, that participation is characterized by society as 'good'; thus, exercise provides a sense of self-discipline, control and competence. It may also give the subject a sense of self-significance through the experience of reaching goals and overcoming obstacles (1).

Studies in older teenagers tend to support the benefits of physical activity in treating adolescent depression (18). Improvement in depression scores was also shown when aerobic exercise programs were used in college students (19).

## ADHD and Learning Disorders

A limited number of studies have addressed the effects of physical activity on specific abnormalities in cognitive and behavioural dysfunctions in children and youth.

A regular jogging program over 10 to 22 weeks has been shown to reduce the need for stimulant medication in children with ADHD (11). The theory behind this observation holds that increased motor activity resulting from physical exertion substitutes for the stimulant effects of medication. There is, however, uncertainty as to the duration of benefits derived from physical activity.

Research done on children with learning disabilities, although limited, shows that a program of regular aerobic exertion over an extended time of 20 weeks leads to an increase in physical fitness and an improvement in self-esteem. However, there was no observed difference in academic performance (20).



## Autistic States

When five- to six-year-old children with autism were engaged in aerobic activities for 5 to 8 min on a regular basis, they showed a reduction in self-stimulating behaviour compared with children in a control group playing quietly. Similar studies in children with autism also showed a decrease in self-stimulatory behaviour following physical activity, but there was no improvement in social function (21).

## Self-esteem

Although good self-esteem is important in all children, obese children are at particular risk for having poor self-esteem and being rejected by peers. Numerous studies have brought attention to the fact that it is difficult to specifically link increases in physical activity with improved self-esteem (22,23). Most studies suggest that exercise programs are related to improvements in the self-esteem scores of participants (24).

Speculation as to why increased physical activity may be associated with improved self-esteem includes the following:

- achieving goals;
- becoming more competent;
- achieving mastery;
- having increased social desirability;
- developing self-preservation strategies; and
- developing social reinforcement.

Previous meta-analysis studies done in elementary school-aged children support the concept that physical activity and a healthy self-concept are related (25). In some of these studies, the relationship was more prominent when aerobic activities were used (25).

## Intelligence

No study has ever demonstrated the impairment of intellectual performances from increases in physical

activity (26). However, the bulk of studies show that physical activity does not increase basic intelligence, but may improve academic performance (27). Studies of children with mental retardation that looked at the role of physical activity in improving intelligence showed that there was no gain in intelligence scores and no improvement in academic performances (28). However, an improved body image was observed in children with mental handicaps when they participated in regular physical activity (29).

## Juvenile delinquency

According to the majority of scientific studies, juvenile delinquency among athletic groups is less than that in the nonathletic population (30). There are some theories, proposed as an explanation. These theories include the following:

- the surplus energy theory (excess energy needs to be spent, and activity allows subjects to ‘blow off steam’) (1);
- the stimulus-seeking theory (the excitement and thrills resulting from physical activity satisfy the increased need for stimulation) (1);
- the boredom theory (sport provides an alternative to occupy a time void, and by participating in physical activities, the child is too tired and too occupied to have energy left for delinquent behaviour) (1).

Positive family interactions as a result of exercise may also be a contributing factor in explaining the reduced incidence of delinquency among physically active children and youth (31).

## Character development

Athletic competition does not appear to promote character development; instead, there are some studies that suggest that individuals with athletic experience have poorer attitudes toward fair play (32). Socially desirable behaviours such as friendliness, generosity and cooperation are inconsistent with physical activities that emphasize winning. However, physical activity may have the potential for personal



growth in qualities including persistence, deeper self-reliance, commitment and motivation, and may increase resourcefulness (33). This is probably truer for noncompetitive physical activities than team competition.

### **Conclusions**

Future studies investigating the link between physical activity and mental health are needed for more definitive conclusions. Although some data suggest that there are benefits from physical activity, including reduced anxiety, depression and juvenile delinquency, and improved concentration, academic grades and self-esteem, further studies are required to draw more definite conclusions. Current data, for the most part, appear to be inadequate.

Meanwhile, preliminary data support a dictum advanced by the ancient Greeks: *Mens sana in corpore sano* – a healthy mind in a healthy body.

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## Trends in Sexual Risk Behaviors Among High School Students — United States, 1991—2001

Unprotected sexual intercourse places young persons at risk for human immunodeficiency virus (HIV) infection, other sexually transmitted diseases (STDs), and unintended pregnancy. Responsible sexual behavior among adolescents is one of the 10 leading health indicators of the national health objectives for 2010 (objective 25.11) (1). To examine changes in sexual risk behavior that occurred among high school students in the United States during 1991—2001, Center for Diseases Control (CDC) in Atlanta analyzed data from six national Youth Risk Behavior surveys (YRBS). This report summarizes the results of the analysis, which indicate that, during 1991—2001, the percentage of U.S. high school students who ever had sexual intercourse and the percentage who had multiple sex partners decreased. Among students who are currently sexually active, the prevalence of condom use increased, although it has leveled off since 1999. However, the percentage of these students who used alcohol or drugs before last sexual intercourse increased. Despite decreases in some sexual risk behaviors, efforts to prevent sexual risk behaviors will need to be intensified to meet the national health objective for responsible sexual behavior.

YRBS, a component of CDC's Youth Risk Behavior Surveillance System, measures the self-reported prevalence of health risk behaviors among adolescents through representative national, state, and local surveys. The six biennial national surveys conducted during 1991—2001 used independent, three-stage cluster samples to obtain cross-sectional data representative of students in grades 9—12 in all 50 states and the District of Columbia. During 1991—2001, sample sizes ranged from 10,904 to 16,296 students, school response rates ranged from 70% to 79%, student response rates ranged from 83% to 90%, and overall response rates ranged from 60% to 70%.

For each cross-sectional survey, students completed an anonymous, self-administered questionnaire, which included identically worded questions about sexual intercourse, number of sex partners, condom use, and alcohol or drug use before last sexual intercourse. Sexual experience was defined as ever having had sexual intercourse. Having multiple sex partners was defined as having had four or more sex partners during one's lifetime. Current sexual activity was defined as having had sexual intercourse during the 3 months preceding the survey. Condom use was defined as having used a condom at last sexual intercourse among currently sexually active students. Alcohol or drug use was defined as having used alcohol or drugs before last sexual intercourse among currently sexually active students. Race/ethnicity-specific trends are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students because the numbers of students from other racial/ethnic groups were too small for meaningful analysis.

During 1991—2001, the prevalence of sexual experience decreased 16% among high school students. Logistic regression analysis indicated a significant linear decrease overall and among female, male, 10th-grade, 11th-grade, 12th-grade, black, and white students. Among 11th-grade students, a significant trend also was detected, indicating that the prevalence of sexual experience declined during 1991—1997 and then leveled off. Prevalence of sexual experience did not decrease significantly among 9th-grade or Hispanic students.

During 1991—2001, the prevalence of multiple sex partners decreased 24%. A significant linear decrease was detected overall and among male, 11th-grade, 12th-grade, black, and white students. Prevalence of multiple sex partners did not show a significant linear decrease among female, 9th-grade, 10th-grade, or Hispanic students.



During 1991—2001, the overall prevalence of current sexual activity did not change. However, the prevalence of current sexual activity decreased 12% among 11th-grade students and 23% among black students. Among students who are currently sexually active, a significant trend was observed in the overall prevalence of condom use, indicating an increase in condom use during 1991—1999 and then a leveling off by 2001. A similar pattern was detected among female, 10th-grade, 12th-grade, and black students with the prevalence of condom use peaking in 1997 or 1999 and then leveling off. A significant linear increase in condom use was detected among male, 9th-grade, 11th-grade, Hispanic, and white students.

During 1991—2001, the prevalence of alcohol or drug use before last sexual intercourse among students who are currently sexually active increased 18%. Logistic regression analysis indicated a significant linear increase overall and among male, 11th-grade, 12th-grade, black, and Hispanic students. Among 9th-grade students, a significant trend was detected, indicating that the prevalence of alcohol or drug use before last sexual intercourse increased during 1991—1997 and then decreased. Prevalence of alcohol or drug use before last sexual intercourse did not show a significant linear increase among female, 10th-grade, or white students.

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### **Editorial Note:**

During 1971—1979, the percentage of females aged 15—19 years living in metropolitan areas nationwide who ever had sexual intercourse increased from 30% to 50% (2); during 1982—1988, the percentage of females aged 15—19 years nationwide who ever had sexual intercourse increased from 47% to 53% (3).

The findings in this report indicate that, during 1991—2001, the percentages of high school students who ever had sexual intercourse and multiple sex partners decreased, and the percentage of sexually active students who used a condom at last sexual intercourse increased and then leveled off. Overall, fewer high school students are engaging in behaviors that might result in pregnancy and STDs, including HIV infection. This decrease in health risk behaviors corresponds to a simultaneous decrease in gonorrhea, pregnancy, and birth rates among adolescents (4—7). These improvements in health outcomes probably resulted from the combined efforts of parents and families, schools, community organizations that serve young persons, health-care providers, religious organizations, the media, and government agencies to reduce sexual risks among young persons. For example, the percentage of high school students who received HIV-prevention education in school increased from 83% in 1991 to 92% in 1997 and then leveled off to 89% in 2001 (CDC, unpublished data, 2002).

The findings in this report are subject to at least two limitations. First, these data pertain only to adolescents who attend high school. In 1998, 5% of those aged 16—17 years were not enrolled in a high school program and had not completed high school (8). Second, although the survey questions demonstrate good test-retest reliability (9), the extent of underreporting or overreporting in YRBS cannot be determined.

One of the national health objectives for 2010 is to increase from 85% to 95% the proportion of adolescents in grades 9—12 who have never had sexual intercourse, have had sexual intercourse but not during the preceding 3 months, or used a condom the last time they had sexual intercourse during the preceding 3 months (1). In 2001, 86% of high school students met this objective, compared with 80% in 1991. Efforts to prevent sexual risk behaviors will need to be intensified to meet the 2010 objective; to sustain decreases in gonorrhea, pregnancy, and birth rates among adolescents; and to reduce HIV infections and other STDs among young persons. In 1998, the birth rate in the United States was 52.1



per 1,000 females aged 15—19 years, four times higher than the average rate among nations in the Organization for Economic Cooperation and Development (10). In addition, interventions are needed to reverse the increasing percentage of sexually active high school students who use alcohol or drugs before their last sexual intercourse.

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Sex	Years	Ever had sexual intercourse %	>3 sex partners during lifetime %	Currently sexually active %	Condom use during sexual intercourse %	Alcohol or drug use before last sexual intercourse %
Female	1991	50.8	13.8	38.2	38.0	16.8
	2001	42.9	11.4	33.4	51.3	20.7
Male	1991	57.4	23.4	38.8	54.5	26.3
	2001	48.5	17.2	33.4	65.1	20.7



## Education Is Prevention: The SWOVA Way

**Gina Giessmann**

**Commonwealth Officer**

**National Crime Prevention Center, Winnipeg**

Like too many other organizations, the efforts of Saltspring Women Opposed to Violence and Abuse (SWOVA) arose from a tragic beginning.

About ten years ago, residents of Saltspring Island (BC) were shocked by a horrific incident of violence in their community.

Upon returning home one evening, a woman and her nine-year-old daughter surprised an intruder. The mother was beaten and injured so badly it wasn't clear she would survive.

The horrible events of that night not only shocked the community, but also brought to the forefront a frightening truth: violence against women and girls can happen anywhere — even in a small, rural community like Saltspring Island (BC).

That night was the spark.

Stunned by the events and the lack of services, a group of women gathered around a kitchen table to discuss the issue. A few months later, SWOVA was formed.

Initially, SWOVA attempted to be all things — a service provider, research institute, resource and education centre, as well as the catalyst for social change and crime prevention.

“We feel like the little engine that could, and it was that event that caused us to focus,” says Project Coordinator Lynda Laushway, one of the women who sat at that first kitchen table.

About six years ago, the determination to be a positive social influence, combined with increasing client

demands, resulted in the creation of two distinct groups, each with a different mandate.

Saltspring Women Opposed to Violence and Abuse, became SWOVA-Community Development and Research Society. The society focussed on the areas of research, education, and prevention.

The second organization, the Gulf Islands Women's Resource Network, took responsibility for the service needs of women who have experienced violence and abuse.

Conversely, SWOVA Community Development and Research Society strives to build strong relationships, especially within the education system. It works with its many partners to expand the understanding of issues concerning the personal security of women and girls.

Through its project, Women and Violence: Education is Prevention, local youth learn the skills needed for healthy interpersonal relationships. The school-based skills development program works with youth in Grades Seven, Eight, Nine, and Eleven.

Working with the school district has been a key to the success of the program. In the beginning, SWOVA delivered single workshops to schools, but those workshops did not significantly influence the behaviour or the development of skills necessary for healthy relationships.

Lasting change required a progression of classes and an opportunity to reinforce the concepts. With a grant from the National Strategy on Community Safety and Crime Prevention, the students receive twelve one-hour sessions that focus on positive



relationship development with peers and dating partners.

A fundamental strength of the program is the “for youth by youth” component. Youth were actively involved in the development of the manual, *Freedom from Fear: The How-To Guide on Violence Prevention Inspired by Teens for Teens*. Youth from the high school also co-facilitate the workshops.

The program strives to give both boys and girls the tools necessary to build a sense of self-worth and self-respect. Other goals of the workshops include the development of skills to set personal boundaries, deal with feelings, handle peer pressure, and recognize healthy and unhealthy relationships. Issues facing youth like gender stereotypes, having a positive body image, power and violence, rights and responsibilities, and the effects of media violence are also addressed.

From the spark that became SWOVA Community Development and Research Society, to coordinating a national demonstration project that reduces violence against women and girls by educating youth, SWOVA has proven itself to be a catalyst for social change.

**For more information** on SWOVA Community Development and Research Society, or the manual *Freedom from Fear: The How-To Guide on Violence Prevention Inspired by Teens for Teens*, visit [www.saltspring.com/swova](http://www.saltspring.com/swova), phone (250) 537-1336 or e-mail [swova@saltspring.com](mailto:swova@saltspring.com).

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# Publications

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## Books and Internet Resources

### Books

#### Puberty

The What's Happening to my Body? Book for Girls  
Lynda and Area Madaras. Newmarket Press, New  
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ISBN: 1-55704-444-9

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ISBN: 0-609-60298-5

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A Canadian Living Family Book, Christine Langlois,  
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Ballantine Books, Mississauga, ON. 1999.  
ISBN: 0-345-39880-7

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young people who call, either through counselling,  
or by referring them to services in their own  
community.

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is Canada's only national, bilingual 24-hour, toll-free,  
anonymous and confidential counseling, referral and  
Internet service for parents and caregivers.  
Information is also available at [http://  
parentsinfo.sympatico.ca/](http://parentsinfo.sympatico.ca/).  
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