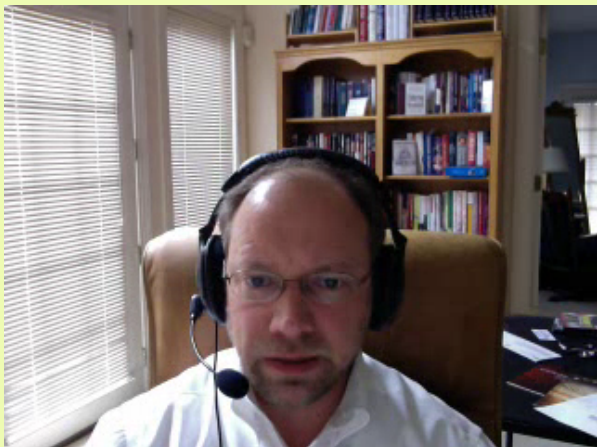


# **PRESCRIPTIONS FOR PARENTS -**

MAKING SCIENTIFIC RESEARCH PRACTICAL FOR FAMILIES



## **MIRROR NEURONS -**

### **How we develop compassion**

Scientists in Italy accidentally discovered mirror neurons when they were eating in their animal research lab and noted the monkey's brain activity monitored via EEG was mirroring their own actions. When they put their hands to their mouths, the monkey's brain signalled hand to mouth behavior and eating even though the monkey was not eating. In other words, cells in our brain respond the same whether we perform an action or see someone else perform the same action. These "mirror neurons" also respond to emotional situations. Our mirror neurons allow us to see and feel what another person is feeling - and we develop compassion.

When we see someone else with an arm injury, our brain signals that our arm also hurts. Our mirror neurons work via signals that come in through our eyes - and so it is important that we help our children look at others' facial expressions and learn to interpret their emotions.

The *Stanford University Center for the Study of Compassion and Altruism Research and Education* has shown that compassion can be taught. Even better - the areas of the brain that are activated by compassion are the same areas that lead to feelings of pleasure!

*Winerman, Lea. "The mind's mirror". American Psychological Association Monitor on Psychology. October 2005; 36:9*  
[www.apa.org/monitor/oct05/mirror.aspx](http://www.apa.org/monitor/oct05/mirror.aspx)



## **INFANTS and TODDLERS**

1. So much research demonstrates how important it is for infants to spend time looking at your face. Infants can recognize facial features from birth and preferentially respond to faces rather than other objects.
2. Spend time gazing at your infant and respond to his sounds. Parents have been noted to spend less time interacting with sons - so make sure you look at and talk with your son.
3. Use emotion words when talking with your infant. "Did you enjoy me tickling you?" "Oh, you look surprised."
4. Describe your feelings. "Ouch. It hurt me when you bit me." "I am disappointed I cannot take you to the park today."
5. Make an effort to look your toddler in the face as often as you can when you are talking to him.
6. Show her how to touch softly and slowly so she learns how to be gentle with others.



## **PRESCHOOLERS**

1. Demonstrate compassion - to your child and to others. When your child falls and scrapes her knee, hold her and look directly into her eyes. Tell her, "I'm so sorry you are hurt. I understand how painful it is. Let's see if a bandaid will help."
2. Talk about compassion and emotions. "How do you think your friend felt when you grabbed her toy?" When another child falls, express your concern. "Oh, that must hurt just like it hurt you when you fell."
3. Be a role model and engage your child. "Let's bake cookies and take them to our neighbor. She is feeling sick and this might help cheer her up."
4. When your child has expressed compassion, acknowledge it and commend him for his concern for others.
5. Encourage everyone in your family to serve each other at home. Children who learn to serve and who have chores or responsibilities also learn compassion.
6. Enforce a "no name calling" policy in your home - parents included. Your child can describe her emotions - "I'm angry" but cannot call her sister "stupid". This helps her learn respect for every one.



## **ELEMENTARY**

1. Learning compassion - another reason to volunteer together as a family! Helping someone who is less fortunate is a wonderful way to teach and develop compassion.
2. Consider sponsoring a child in another country through organizations such as Compassion International ([www.compassion.com](http://www.compassion.com)) or World Vision ([www.worldvision.org](http://www.worldvision.org)). Your child could help think of ways to earn money to sponsor the needy child - and learn about another country at the same time.
3. At this age, children often laugh at another's pain. A teachable moment can happen when you see children laughing at someone's pain. Talk with your child and say, "That's not really funny, is it? I wonder how the hurt child feels? Can we do anything to help?"
4. Talk with your child about bullying and let her know that she should always come to you if someone she knows has been bullied, including herself. Talk about ways she can help support a child who is being bullied.
5. Help your child avoid jealousy and learn to be less selfish by applauding the success of another child or sibling. Smile, touch your child and say,



## **ADOLESCENTS**

1. Have a family conversation about ways your family can interact with your community while helping everyone demonstrate compassion. Can you serve meals at a homeless shelter, visit a senior nursing home, mow a neighbor's lawn? Could your teen babysit for free to help another family? volunteer with Habitat for Humanity one day?
2. Does your teen like to write or draw? Can he think of an artistic way to encourage compassion among his peers?
3. Remind your teen that empathy develops through visual cues of others' facial expressions. Social media, unfortunately, interferes with face-to-face time, so encourage your teen to actually talk personally with her friends. (Another reason to decrease screen time.)
4. Because the frontal lobe of your teen's brain is still immature, he may not interpret others' facial expressions correctly. As you see people expressing emotion - in film or real life - comment on and describe the emotions for your teen.
5. When you discuss an emotionally charged issue with your teen, sit or stand close to them, maintaining eye contact. Allow your emotions to register on your face as you express how

"What a good job she did -  
don't you agree?"

you feel.

6. Read books about those  
who had compassion - like  
Mother Teresa.

6. Surprise your teen with  
a hug for no reason at all -  
even if he pulls away! It  
says "I love you" and  
demonstrates spontaneous  
caring.

**Jane E. Anderson, M.D.**

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[md@physicianscenter.org](mailto:md@physicianscenter.org)

[www.physicianscenter.org](http://www.physicianscenter.org)